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NOISE MEASUREMENTS DURING APPROACH OPERATIONS ON RUNWAY 21R AT DETROIT METROPOLITAN AIRPORT

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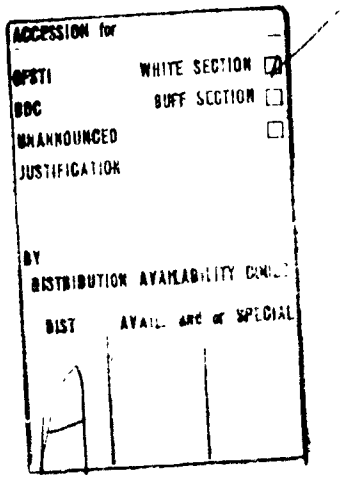

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16. Abstract

Aircraft noise and distance data were acquired at three locations under the ILS localizer path to runway 21R at Detroit Metropolitan Airport preceding and during Phase A of a three phase "field evaluation of 3,000 ft. glide slope intercept program" conducted by the FAA. In Phase A of the field evaluation, the intercept altitude was increased to 4,000 ft. MSL (above mean sea level) from the 3,000 ft. MSL altitude in use preceding the evaluation tests.

During two ten-day periods of measurements, noise of all IFR approaches on runway 21R between the hours of 0600 and 2400 were recorded (over 4,000 recordings total). Effective perceived noise levels (EPNL) and other noise measures were obtained for much of the recorded data; NEF values were then calculated from the EPNL data.

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LIST OF ABBREVIATIONS AND SYMBOLS

AGL	above ground level
D	duration correction in dB
d	duration time, sec.
EPNL	effective perceived noise level in EPNdB
IFR	instrument flight rules
ILS	instrument landing system
IP	glide slope intercept point
MSL	above mean sea level
NEF	noise exposure forecast
OM	outer marker
PNLC	composite perceived noise level in PNdB
PNLM	maximum perceived noise level in PNdB
PNLTM	maximum tone-corrected perceived noise level in PNdB
SENEL	single event noise exposure level in dB
TRACON	terminal radar approach control

I. INTRODUCTION

This report presents noise and other data acquired during two 10-day periods of aircraft noise measurements at three locations under the ILS (instrument landing system) approach path to runway 21R at Detroit Metropolitan Airport. The field measurements were made in May and June of 1971, preceding and during Phase A of a planned three phase "field evaluation of the 3,000 ft glide slope intercept program" jointly conducted by the FAA Aircraft Traffic Service, Office of Aviation Policy and Plans, and the Division of Noise Abatement, Systems Research and Development Service.[1/*] The noise measurements, together with weather and distance information, were acquired by Bolt Beranek and Newman Inc. (BBN) as authorized under FAA Contract DOT-FA71WA-2589. The noise measurements form one part of FAA studies of air traffic procedures which might reduce aircraft noise exposure near airports.

The aircraft noise and distance data provide basic information for evaluating changes in the noise environment under and in the vicinity of approach paths to runway 21R during IFR (instrument flight rules) operations under differing air traffic procedures. During the two measurement periods, noise of individual aircraft approaches was recorded; the recorded noise signals were later reduced to obtain effective perceived noise level (EPNL) values and other noise measures. Whenever possible, photographs of the aircraft were taken at each measurement position to establish aircraft identification and to determine the "distance of closest approach" to the

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* References are listed together at the end of the report.

measurement position. From the EPNL data and number of observed approaches, noise exposure forecast (NEF) values describing the noise environment resulting from IFR operations were calculated.

The test program (particularly as it pertains to the planning of the noise measurements) and the data acquisition and data reduction procedures are reviewed in Section II of the report. Noise, distance and weather data are given in Section III. NEF values and mean EPNL values are reported in Section IV. The final section of the report, Section V, compares the mean EPNL and NEF values observed for the two test phases.

This report is limited to presentation of basic noise and distance data, and calculation of NEF and mean EPNL values at the measurement positions. Further analysis of the aircraft noise and distance data will be reported separately.

II. TEST PROGRAM OUTLINE AND TEST CONSTRAINTS

A. Runway 21R Approach Path

As noted in the introduction, the major purpose of the noise measurements was to provide basic information for evaluating changes in the noise environment in land areas near IFR approach paths under differing IFR traffic procedures. IFR approaches utilizing ILS facilities at Detroit Metropolitan Airport (DTW) may occur on any of three runways -- 21R, 3L and 27 - with radar approach control services provided by the terminal radar approach control (TRACON) room located at the airport terminal.

Approaches on runway 21R were selected for the noise measurement as this runway is one of the two most frequently used instrument runways. Land under the approach paths to runway 21R is also more highly developed and urbanized than the areas under the other IFR approach paths. At DTW, approaches frequently shift from one runway to another due to changing wind conditions, introducing variability in the number of approaches observed per day on any of the runways.

The major instrument approach paths to runway 21R, as defined by the local FAA air traffic staff, are sketched in Fig. 1. Also identified in the figure is the location of the outer marker (OM) and the intercept points (IP), the points at which the aircraft should ideally intercept the 2.8° glide slope altitude profile. Under ideal conditions, the aircraft should intercept the localizer at the "turn-on" point, which is three nautical (n) miles from the IP.

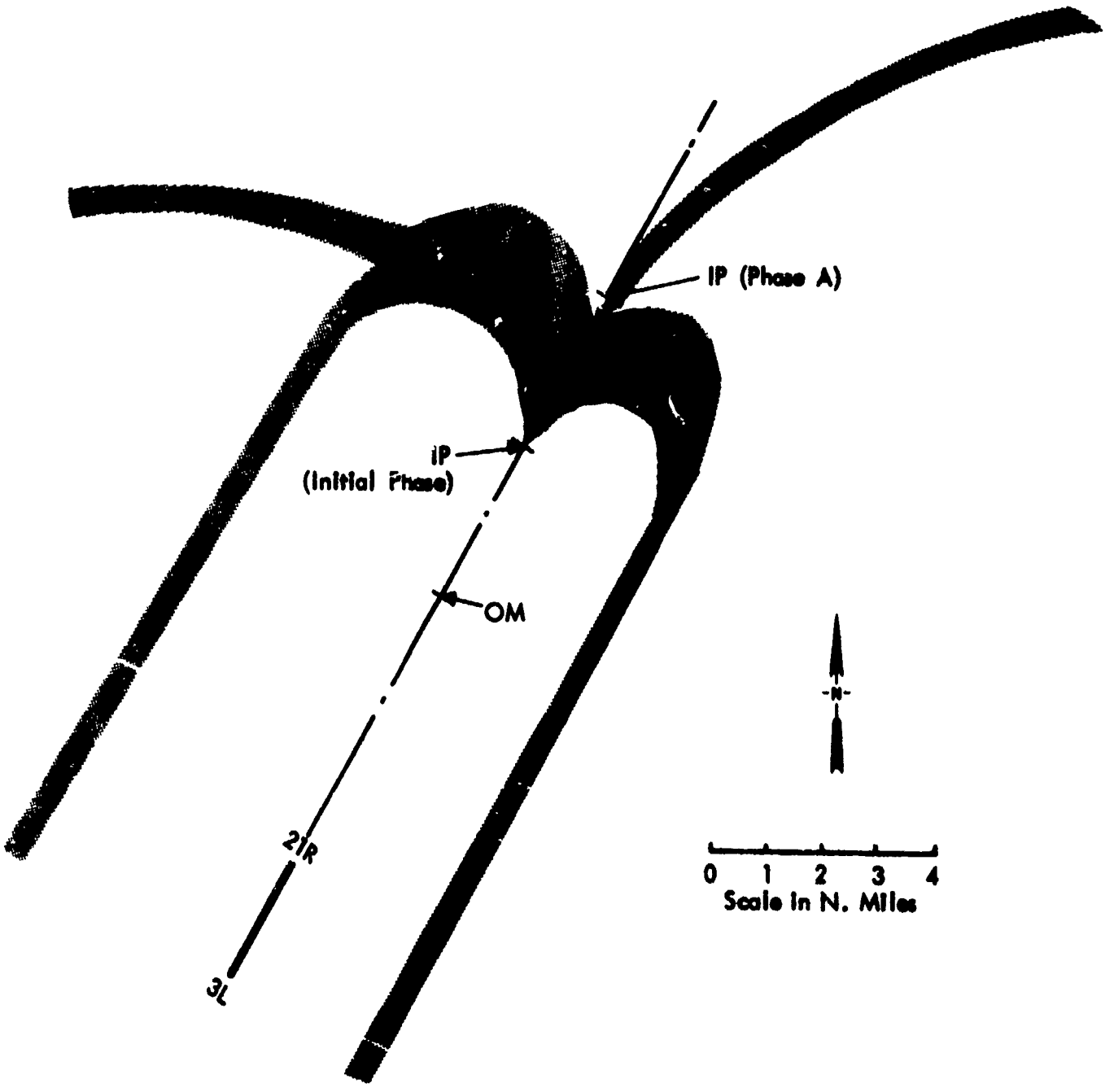

FIGURE 1. TYPICAL APPROACH PATHS FOR ILS LANDINGS ON RUNWAY 21L - CURRENT OPERATIONS (INITIAL TEST PHASE)

One will note from Fig. 1 that aircraft approach the ILS landing track from several directions. Also to be noted is that the point at which the aircraft turn on to the localizer is variable. It is heavily dependent upon the volume of traffic and number of aircraft being handled. As approach traffic increases in volume, the point at which the aircraft intercept the localizer track moves further from the runway.

B. Test Program Description

The first set of noise measurements, taken between 17 and 26 May, was conducted using current (non-test) IFR procedures at the airport. (These are identified as "initial phase" measurements throughout the report.) The second series of measurements, between 2 and 11 June, was conducted during the Phase A test procedures.

During each series of measurements, noise from aircraft ILS approaches was measured between 0600 and 2400 hours at each of these measurement positions.

The typical altitude profile for current (non-test) ILS approaches on runway 21R is shown in Fig. 2, identified as the "initial phase" profile. Under this procedure, aircraft remain in level flight at 3,000 ft above mean sea level (MSL) (approximately 2,400 ft above ground level (AGL))until intercepting the 2.8 degree glide slope. Under ideal conditions the turn-on point (the point at which the aircraft should intercept the localizer) is approximately 10.9 n miles from the runway threshold (or 5.7 n miles from the OM which is located approximately 5.2 n miles from the runway threshold). The aircraft would intercept the glide slope (on course and at proper altitude) at the IP, approximately 2.7 n miles from the OM.

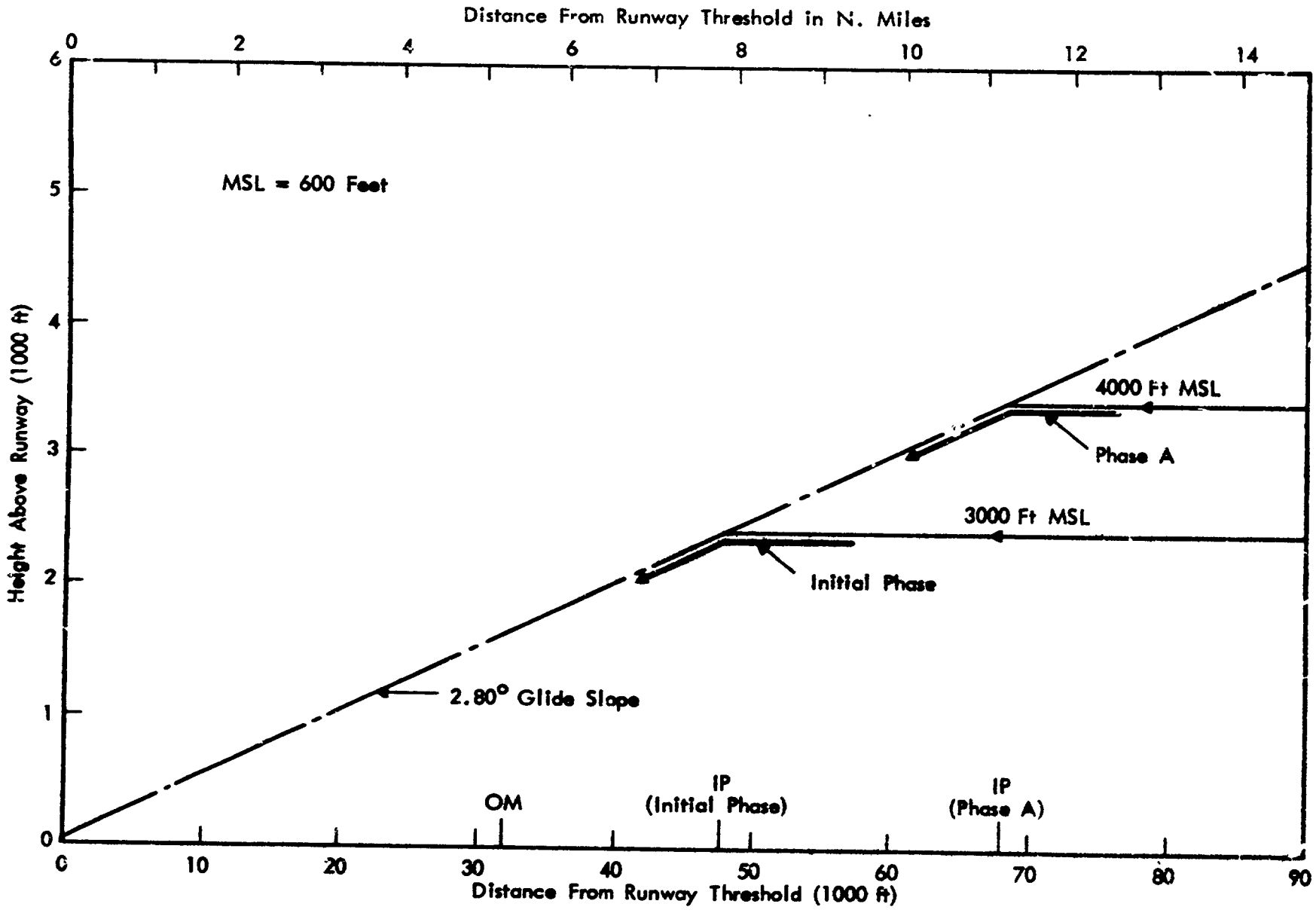

FIGURE 2. IDEALIZED AIRCRAFT DESCENT PROFILES

For the Phase A tests, the aircraft altitude prior to interception of the glide slope was increased to 4,000 ft MSL (approximately 3,400 ft AGL). This Phase A profile is also shown in Fig. 2. When the intercept altitude is increased to 4,000 ft MSL, the IP moves out to 11.3 n miles from the runway threshold, and the turn-on point is shifted to 14.3 n miles from threshold.

The increase in intercept altitudes from 3,000 to 4,000 ft should result in lower noise levels under the approach path at positions beyond the initial phase IP. For example, the EPNL vs slant distance curves for four-engine turbofan aircraft on approach, often used in NEF computations, indicate a decrease of EPNL of approximately 10 EPNdB per doubling of distance for slant distances in the range of 1,000 to 4,000 ft.[2/] On this basis, one would estimate a reduction of about 5 EPNdB in typical noise levels for the increase in intercept altitudes.

C. Selection of Measurement Positions

While verification of a difference in noise levels with altitude under controlled tests of a given aircraft would be relatively straight forward, field verification of such moderate changes in noise levels between test phases is, in practice, quite difficult for several reasons:

a. Variability among aircraft and in aircraft operating conditions (i.e., engine and flap settings, airspeed, etc.);
b. Variability in weather conditions;
c. Dispersion in flight tracks prior to interception of the glide slope;
d. Differences in flight tracks (prior to interception of the glide slope) between test phases.

A further factor acting to reduce the number of IFR approach flights which can be used to compare differences in test procedures is the fact that it is quite common, under good weather and light traffic conditions, for commercial aircraft operating under IFR to make a visual approach to the airport. Such aircraft, particularly when approaching Detroit from the south, may well turn on final approach near or inside of the outer marker and hence would not pass over measurement stations located under the normal IFR flight path.

As a consequence, the following rationale was adopted in establishing noise measurement positions. One position (Station A), was maintained at the OM during both measurement phases. Data from this position help identify differences in test data on a day-to-day basis occurring because of weather and shifts in runway usage. Data from this position also serves as a basis for "normalizing" NEF values to account for the varying numbers of operations observed on the different test days.

The remaining two measurement positions were located between the IP and the turn-on point. Positions further out on the approach path were not selected because of the dispersion in flight tracks.

Selection of actual field positions was further modified by the particular needs for:

a. An open space for visual observation of the flights;
b. Low ambient noise levels, which meant avoidance of positions close to local traffic or heavy highway traffic.

Since the approach paths, particularly beyond the outer marker, are over dense urban areas, the above considerations drastically limited the choice of sites.

Table I identifies the measurement stations. Their location with respect to the approach path profiles is shown in Fig. 3. Figure 4 shows the location of the stations with relation to the ILS flight track.

While measurements were made only at three positions simultaneously, a total of four different positions were employed during the Phase A measurements. Stations A and D were used throughout. However, measurements were shifted from Station E to Station F after several days of measurement because of the high ambient noise levels and wide aircraft path dispersion encountered at Station E.

D. Noise Data Acquisition and Reduction Procedures

Each measurement station had self-contained recording capability, utilizing the following instrumentation components:

Bruel & Kjaer Type 4133 1/2-in condenser microphone
Electro-Voice 355 Windscreen
Bruel & Kjaer Type 2619 preamplifier (or Hewlett-Packard Type 15018B preamplifier)
Bruel & Kjaer Type 2203 sound level meter
Kudelski Nagra III Tape Recorder
Bruel & Kjaer Type 4220 Pistonphone Calibrator

For meteorological data, each station was equipped with a psychrometer and an anemometer. Each station also had a 35 mm camera with appropriate lenses to photograph the aircraft. A VHF receiver enabled the operator to keep informed of the current air traffic situation.

TABLE I

LOCATION OF NOISE MEASUREMENT STATIONS

Test Phase	Measurement Station	Location
Initial and A	A	400' N of Avondale on the service road to Westwood Park in the City of Inkster. (This site is in the immediate vicinity of the outer marker for ILS Runway 21R.)
Initial	B	In River Rouge Park, 150' W of Outer Drive, 1000' S of Joy Road.
Initial	C	In River Rouge Park, near the nursery.
A	D	In the nursery just west of the intersection of Oakfield and Santa Maria.
A	E	On Forrer near the intersection with Clarita.
A	F	NW of the intersection of Bretton and Glastonbury in North Rosedale Park.

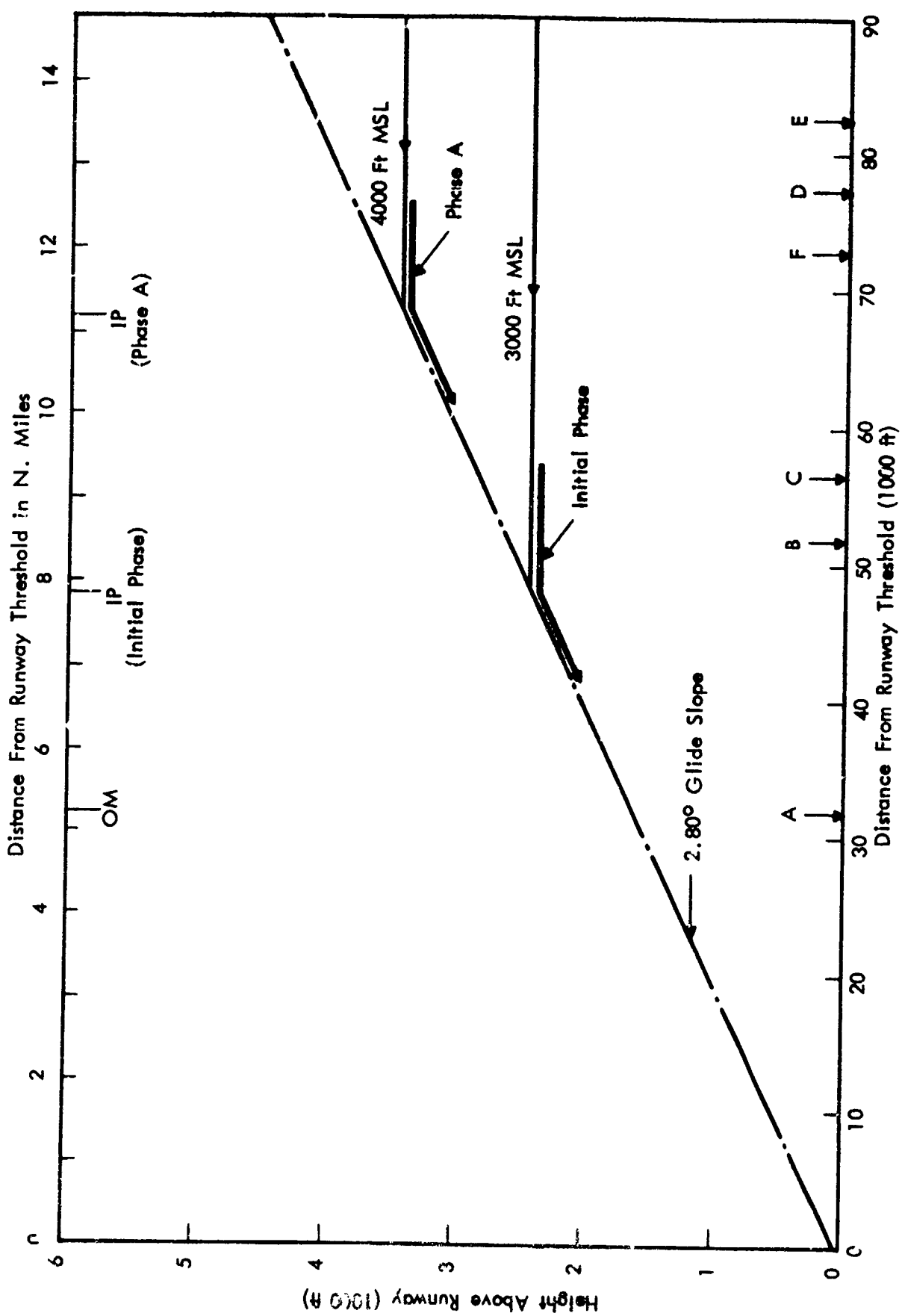

FIGURE 3. LOCATION OF MEASUREMENT POSITIONS WITH RESPECT TO IDEALIZED DESCENT PROFILES

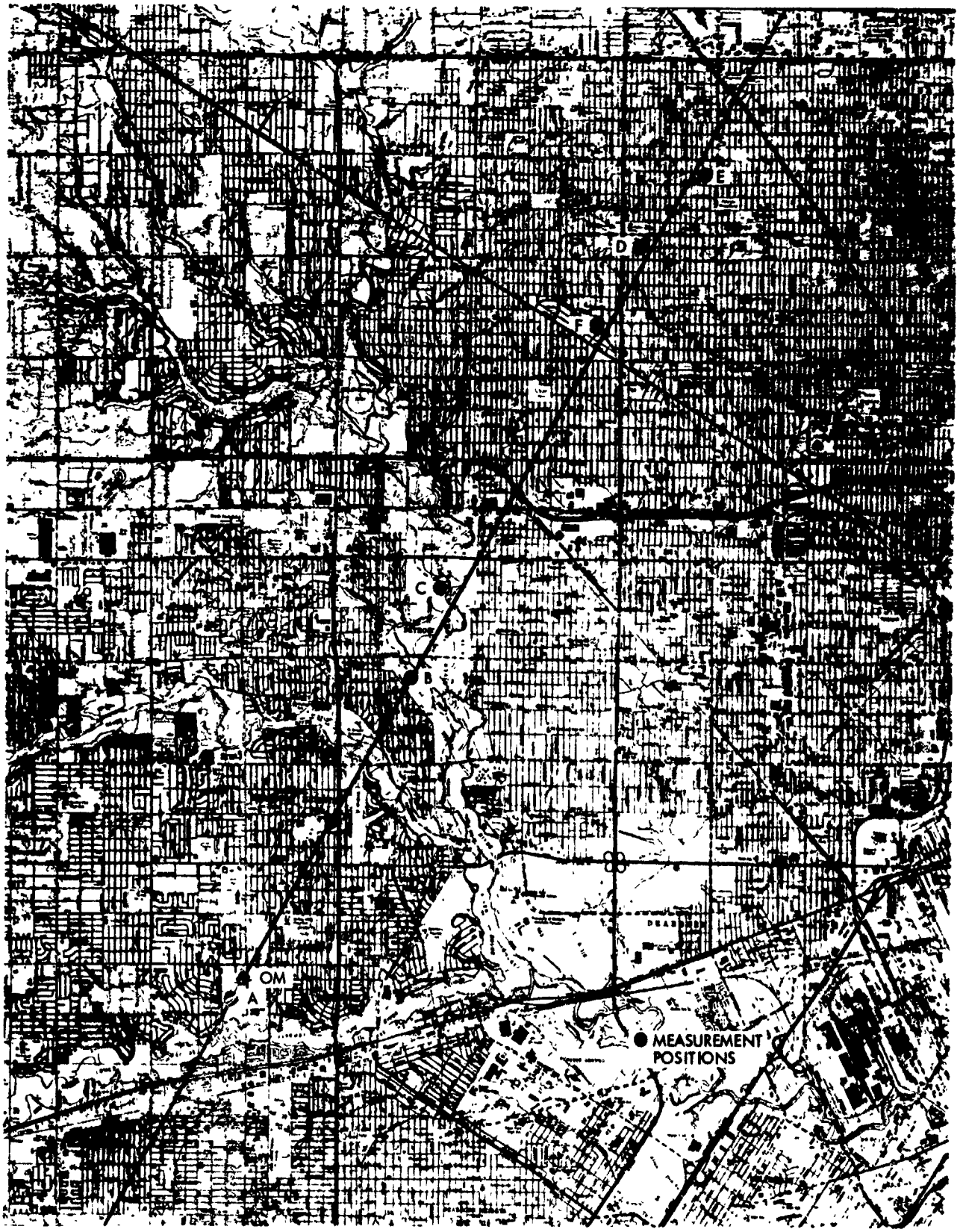

FIGURE 4. LOCATION OF MEASUREMENT POSITIONS WITH RESPECT TO RUNWAY 21R ILS FLIGHT TRACK

Field measurements consisted of recording on magnetic tape the ambient and flyover noise levels for each event. In addition, whenever possible, a photograph of the aircraft was obtained. The photographs were taken at the time when the aircraft was judged to be closest to the observer.

Once each hour, or more frequently if weather conditions made this desirable, a relative humidity measurement was made and an average wind speed reading taken.

Pistonphone calibration signals were recorded at the beginning and end of each reel of tape. If runway 21R was not used for any length of time a new calibration was performed when the runway was reactivated. Additionally, one set of insert resistor calibration gear was available and insertion calibrations were performed by supervisory personnel.

The magnetic tapes recorded in the field were analyzed in the laboratory using a Hewlett-Packard 8054-A Real Time Audio Spectrum Analyzer under the control of a Digital Equipment Corporation PDP-8 computer. The computer causes the recorded signal to be sampled at 1/2-second intervals, makes corrections for background noise levels, and corrects the whole system to flat response. (In this context the system is viewed as all equipment from the microphone to the input of the spectrum analyzer and corrections therefore include microphone sensitivity, record-playback characteristics of the tape recorders and all calibration data as recorded in the field.) The digitized noise data are then used to calculate the various noise levels.

More detailed descriptions of the data acquisition and data reduction instrumentation and of data handling procedures are given in Appendix A.

III. DATA PRESENTATION

A. Number of Flights and Field Measurements

Table II shows the total number of noise recordings made per day during the hours from 0600 to 2400 during the field measurements. The table also lists the number of field recordings which were later reduced to obtain aircraft noise levels. A total of 4059 field recordings were obtained, with over 1400 recordings reduced to obtain noise level data.

For comparison, Table III and Fig. 5 show the expected total number of arrivals of scheduled commercial aircraft at Detroit Metropolitan Airport, based on an analysis of the airline schedules for May 1971 published in the *Airline Guide*.[3] Figure 5 also shows the total number of scheduled turbojet and turbofan aircraft (excluding propeller aircraft). The total number of scheduled airline arrivals was 278 per day with over 97 per cent of the arrivals occurring between 0700 to 2400 hours. Although a number of IFR landings of non-scheduled aircraft occur, the scheduled transport aircraft can be expected to account for a very large proportion of the IFR arrivals at Detroit Metropolitan Airport.

Part of the first day for each measurement period (May 17 and June 2) was devoted to instrumentation checkout and crew training, hence noise measurements for these days are incomplete. However, for the remaining days in each period, the number of field recordings noted in Table II corresponds essentially to the number of aircraft on approach passing near the respective measurement positions between the hours of 0600 to 2400. Aircraft well off to the side of the measurement stations were not recorded, since such aircraft were not judged to be on IFR approaches.

TABLE II

TOTAL NUMBER OF NOISE MEASUREMENTS

A - INITIAL PHASE MEASUREMENTS

Date	Period	Field Noise Recordings Positions A	B	C	Total No.	Reduced Noise Data Positions A	B	C	Total No.
5-17	D	66	21	17	104				
	E								
	N								
5-18	D	125	61	60	246	97	38	45	180
	E	35	22	20	77	34	18	17	69
	N	6	2	2	10	6	2	2	10
5-19	D	84	72	61	217	31	22	24	77
	E	7	3	1	11	6			6
	N	12	2	2	16	6			6
5-20	D	138	73	73	284	22	18	23	63
	E	2	1	1	4				
	N	3	2	1	6				
5-23	D	85	39	28	152	23	10	6	39
	E	29	12	15	56	8	7	11	26
	N	6	3	2	11	3	2	2	7
5-24	D	95	59	71	225	19	18	20	57
	E	7	4	3	14				
	N								
5-25	D	182	92	125	399	23	17	17	57
	E	29	22	14	65	20	12	7	39
	N	7	1	7	15			2	2
5-26	D	45	27	20	92				
	E	10	12	7	29				
	N	13	4	1	18				

B. PHASE A MEASUREMENTS

Date	Period	Field Noise Recordings Positions A	D	E	F	Total No.	Reduced Noise Data Positions A	D	E	F	Total No.
6-2	D	69	21	42		132	24	5	7		36
	E										
	N										
6-3	D	159	78	87		324	21	19	13		53
	E	42	18	15		75	20	5	4		29
	N	12	3	4		19	3	2	1		6
6-4	D	99	51	55		205	20	16	11		47
	E	10	3			13		2			2
	N	4	1	1		6	3				3
6-5	D	46	28		40	114	21	11		12	44
	E	23	7		6	36	18	3		4	25
	N	10	2		1	13	2			1	3
6-6	D	69	41		30	140	20	12		12	44
	E	36	25		11	72	18	11		2	31
	N	13	5		2	20	2				2
6-7	D	158	99		137	394	148	68		83	298
	E	41	19		29	89	24	5		12	41
	N	11	2			13	9	2		1	12
6-8	D	35	12		18	65	19	5		3	27
	E										
	N										
6-10	D				9	9					
	E	30	10			40	21	5		3	29
	N	3	2		2	7		1		1	2
6-11	D	72	24		43	139	16	8		2	26
	E	40	21		22	83	13	12		12	37
	N										

TABLE III

TOTAL NUMBER OF ARRIVALS OF SCHEDULED COMMERCIAL AIRCRAFT AT DETROIT METROPOLITAN AIRPORT, MAY 1971*

Hour	Number of Arrivals
Midnight to 0059	4
0100 to 0159	1
0200	0
0300	1
0400	0
0500	2
0600	4
0700	11
0800	20
0900	16
1000	18
1100	16
1200	13
1300	9
1400	16
1500	24
1600	21
1700	14
1800	23
1900	27
2000	14
2100	14
2200	7
2300	3

* Based on May 1971 issue of *Official Airline Guide, Quick Reference, North American Edition.*

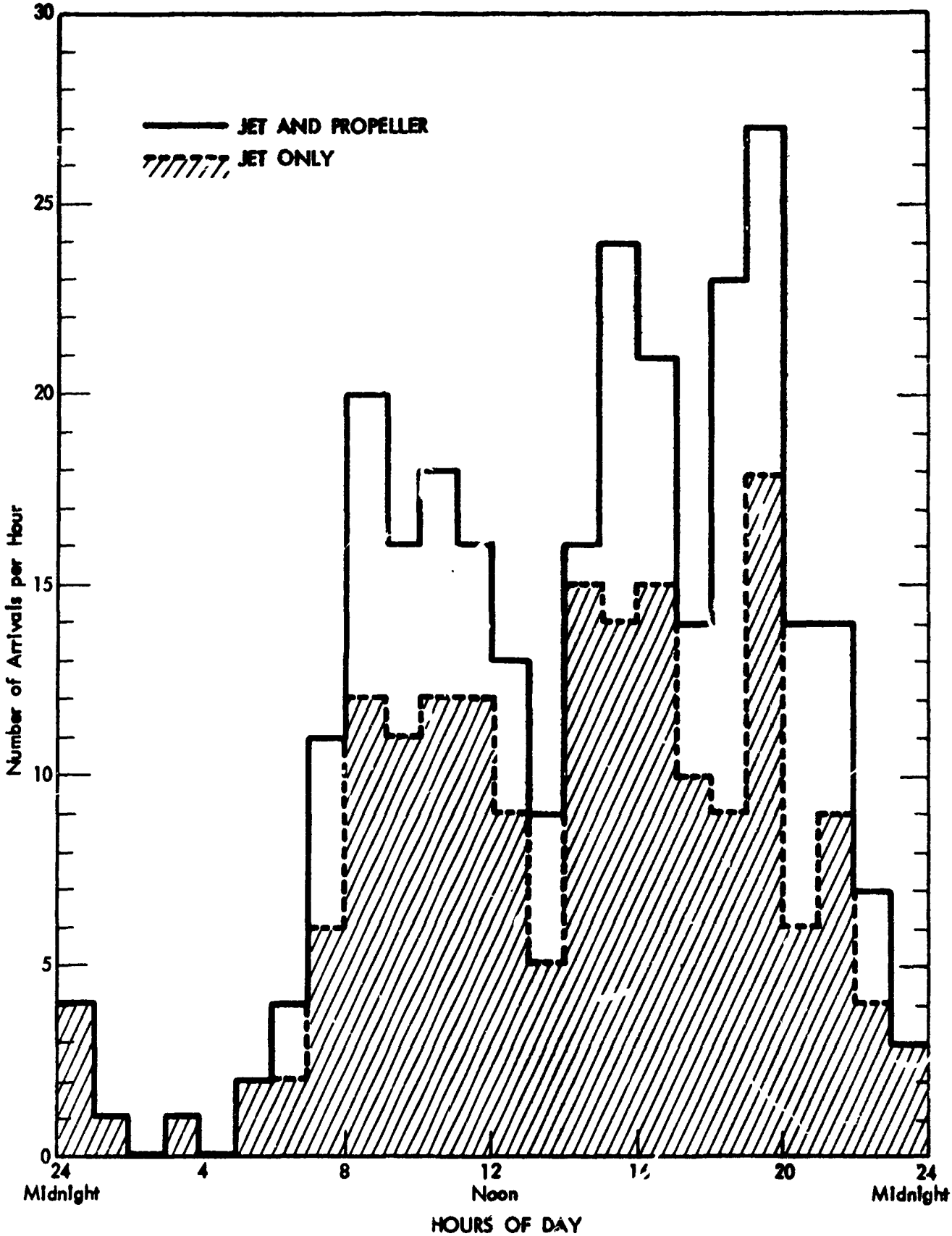

FIGURE 5. SCHEDULED AIRLINE ARRIVALS AT DTW (MAY 1971)

The variation in the number of field recordings per day listed in Table II reflects the large variability in runway 21R utilization, with operations shifted to other runways quite frequently. Also to be noted from Table II is the fact that more aircraft were observed at position A than at the outer positions.

For one day of each test period (May 18 and June 7), all useable recorded data were analyzed. For the other test days, samples of recorded noise data were reduced. In selecting the recordings to be sampled, propeller aircraft recordings were omitted. These aircraft were significantly less noisy than the jet aircraft, hence contributed little to the NEF values. Jet aircraft recordings were selected to obtain an approximate balance between four-engine, and two- and three-engine jet aircraft. Further selection was made to obtain a distribution of recordings during morning, afternoon, evening and night periods.

B. Weather Information

Weather information during the hours of field measurement is summarized in Table IV. This table lists the temperature, relative humidity, barometric pressure, and wind direction and speed reported by ESSA at Detroit Metropolitan Airport, and the temperature, relative humidity and wind speed observed at the individual measurement positions. Data are listed at hourly intervals spanning the period of field measurements.

C. Noise and Distance Information

Table V presents the noise and distance information obtained during the field measurements. Data are listed in the table according to position, date and time of recording. Aircraft identification was established by inspection of photographs

TABLE IV

WEATHER SUMMARY

Date	Time EST	ESSA Weather Bureau, Airport					Field				Field				Field			
		T °F	Rel. Hum. %	P_o in. Hg.	Wind Dir. ° Mag.	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn
May 17	12	72	30	29.240	180	10	A	69	47	07	B				C			
	13	72	28	29.220	200	11	A	72	47	09	B				C			
	14	74	30	29.210	180	11	A	72	38	07	B				C			
	15	76	31	29.200	160	12	A	73	42	06	B				C			
	16	76	30	29.180	160	12	A	75	37	09	B	77	67	08	C	77	61	05
	17	75	33	29.170	170	11	A	72	42	08	B	75	39	05	C			
	18	71	35	29.165	170	10	A	69	51	04	B				C			
May 18	6	56	86	29.140	160	07	A	58	97	02	B	65	70	07	C	62	79	03
	7	64	73	29.150	190	10	A	63	87	09	B	70	68	09	C	69	67	08
	8	70	63	29.150	200	12	A	71	72	10	B	73	61	08	C	75	58	10
	9	76	52	29.140	230	15	A	76	59	10	B	79	55	12	C	79	53	12
	10	77	49	29.140	230	15	A	76	59	08	B	82	50	18	C	82	51	10
	11	81	43	29.130	250	15	A	78	54	10	B	83	46	16	C	82	45	12
	12	83	40	29.120	210	15	A	81	49	10	B				C	85	36	12
	13	85	34	29.110	230	18	A	84	43	14	B	86	38	21	C	86	33	10
	14	89	36	29.105	200	18	A	85	41	20	B	90	33	18	C	88	32	10
	15	88	29	29.100	220	19	A	87	38	17	B	89	33	26	C	88	37	10
	16	87	30	29.110	240	17	A	88	39	08	B	88	34	16	C			
	17	84	35	29.095	230	14	A				B	86	33	09	C	85	37	12
	18	84	35	29.095	230	15	A	82	47	06	B	85	36	09	C			
	19	81	41	29.090	220	10	A	78	54	05	B	80	45	05	C	79	46	07
	20	73	46	29.085	180	07	A	73	57	00	B				C			
	21	73	53	29.100	190	09	A	71	68	00	B				C			
	22	72	55	29.100	190	08	A	70	72	00	B	75	54	05	C			
	23	70	61	29.100	170	07	A	67	80	00	B	72	61	05	C			
	24	69	66	29.100	190	07	A	66	85	00	B				C			
May 19	6	62	81	29.115	180	08	A	62	94	09	B	67	78	06	C	65	80	04
	7	67	70	29.120	180	11	A	64	90	09	B	70	72	07	C	69	70	04
	8	71	64	29.115	200	12	A	71	79	10	B	74	65	10	C	75	62	05
	9	75	56	29.115	210	16	A	72	69	10	B	77	59	16	C	77	57	07
	10	78	50	29.095	220	16	A	75	66	12	B	79	55	14	C	78	54	04
	11	79	49	29.095	220	17	A	79	57	10	B	83	49	26	C	81	48	08
	12	82	44	29.070	200	17	A				B	84	43	18	C	81	48	04
	13	83	41	29.070	190	20	A				B	84	46	30	C	83	49	15
	14	84	40	29.050	210	18	A	84	44	07	B	84	46	08	C	84	46	12
	15	83	41	29.045	200	20	A	83	49	10	B	84	46	22	C			12
	16	81	46	29.025	200	16	A	81	55	08	B				C	81	55	12
	17	65	90	29.050	260	07	A				B				C			
	18	66	84	29.100	270	14	A				B				C			
	19	64	84	29.130	210	06	A				B				C			
	20	63	87	29.150	160	06	A				B				C			
	21	62	90	29.180	240	04	A				B				C			
	22	61	70	29.220	290	12	A	64	70	09	B	61	68	09	C	61	63	04
	23	57	72	29.250	310	10	A				B	57	66	12	C	58	66	08
	24	54	69	29.280	320	10	A				B				C	53	75	00
May 20	6	45	93	29.305	220	05	A	49	93	00	B	51	84	00	C	50	93	
	7	47	93	29.320	230	07	A	51	81	00	B	56	82	04	C			
	8	51	86	29.335	230	09	A	57	65	02	B	61	73	10	C	59	78	06
	9	60	70	29.325	180	11	A	63	62	06	B	65	59	12	C	65	56	10
	10	64	50	29.320	200	13	A	65	54	10	B			18	C	69	55	12
	11	65	50	29.310	240	10	A	66	55	10	B	68	50	12	C	66	53	12
	12	66	49	29.300	220	14	A	68	56	04	B	67	51	08	C	66	53	08

TABLE IV (Con't)

Date	Time EST	ESSA Weather Bureau, Airport					Field				Field				Field			
		T °F	Rel. Hum. %	P in. Hg.	Wind Dir. ° Mag.	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn
May 20	13	63	69	29.295	250	14	A	69	97	07	B	65	59	05	C	64	58	09
	14	64	73	29.295	250	07	A	69	97	10	B	67	49	10	C	69	47	12
	15	68	47	29.285	260	13	A	68	97	10	B	69	49	12	C	69	43	10
	16	69	41	29.285	290	15	A	71	86	08	B	71	41	12	C	68	38	10
	17	66	37	29.290	290	15	A	68	44	10	B	69	35	08	C			
	18	66	34	29.300	290	12	A	65	37	09	B	63	53	09	C	67	37	13
	19	65	30	29.320	320	12	A	65	35	12	B	54	36	07	C			
	20	59	39	29.340	310	05	A	61	55		B	50	64	00	C	62	36	
May 23	9	60	58	29.405	120	13	A				B				C			
	10	62	46	29.395	150	13	A	65	46	10	B	66	53	08	C	63	46	07
	11	63	41	29.385	130	12	A	67	45	10	B	68	42	12	C	65	44	08
	12	64	40	29.375	150	13	A	69	45	10	B	68	46	16	C	66	40	07
	13	66	40	29.335	130	15	A	69	45	02	B	68	54	10	C			
	14	66	37	29.335	140	07	A	7	48	96	B	71	46	10	C			
	15	67	37	29.310	140	06	A	69	43	04	B	71	39	14	C			
	16	68	35	29.300	140	08	A	70	49	00	B	68	40	12	C			
	17	68	35	29.265	130	09	A	73	46	02	B	70	38	10	C			
	18	66	36	29.250	140	10	A	72	43	07	B	67	41	10	C	72	38	03
	19	63	41	29.230	140	07	A	64	47	10	B	63	50	08	C	65	39	05
	20	61	41	29.215	120	10	A	63	48	10	B	60	48	14	C			
	21	57	49	29.210	120	10	A				B	59	47	10	C	59	44	04
	22	53	54	29.210	110	08	A				B	59	47	09	C			
	23	53	59	29.200	110	05	A				B				C	59	49	05
	24	54	59	29.190	110	05	A				B				C			
May 24	12	66	84	28.975	180	14	A	68	76	09	B				C			
	13	68	79	28.980	200	13	A	72	75	07	B				C	67	80	04
	14	74	69	28.955	220	12	A	77	67	07	B	72	91	12	C	76	66	04
	15	76	64	28.945	230	13	A	75	66	07	B	75	66	18	C	75	70	10
	16	75	62	28.915	210	12	A	76	64	10	B	77	67	14	C	80	61	06
	17	74	64	28.890	190	12	A	76	55	11	B	77	61	09	C	75	66	06
	18	70	59	28.910	190	15	A	72	57	08	B	71	58	20	C	73	53	07
	19	66	70	28.940	220	18	A				B				C			
	20	62	87	28.930	240	09	A				B				C			
	21	61	87	28.910	190	06	A	62	2	07	B				C	69	94	05
	22	61	90	28.920	190	09	A				B	61	94	06	C			
May 25	7	58	81	28.820	230	19	A				B				C	60	78	08
	8	58	78	28.835	230	13	A	59	78	11	B	62	66	26	C	60	78	12
	9	58	69	28.870	240	15	A	61	68	10	B				C	60	63	12
	10	60	62	28.885	250	16	A	60	63	21	B	60	68	18	C	58	72	10
	11	56	72	28.905	250	13	A	60	68	12	B	60	68	20	C	60	68	10
	12	56	72	28.915	230	15	A	57	71	14	B	60	73	16	C	59	67	10
	13	54	77	28.945	220	14	A	58	69	12	B	57	71	24	C	59	67	16
	14	56	69	28.955	250	16	A	58	69	08	B	57	71	22	C	58	66	14
	15	55	72	28.965	240	17	A	58	69	08	B	57	74	20	C			14
	16	55	72	28.985	260	15	A	56	71	14	B			22	C	55	76	14
	17	55	68	29.005	250	20	A	55	70	10	B	56	75	22	C	55	83	12

TABLE IV (Con't)

Date	Time EDT	ESSA Weather Bureau, Airport					Field				Field				Field			
		T °F	Rel. Hum. %	P_0 in. Hg.	Wind Dir. ° Mag.	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn
May 25	18	54	66	29.015	240	20	A				B	55	70	09	C			15
	19	53	69	29.035	240	16	A	54	70	10	B	55	70	08	C	54	70	08
	20	52	74	29.035	250	17	A	52	81		B	54	76	08	C	55	75	08
	21	50	83	29.035	250	15	A				B				C			
	22	49	89	29.075	240	14	A				B				C	51	81	07
	23	49	86	29.085	250	13	A				B				C	51	75	08
	24	49	86	29.085	240	10	A				B				C			
May 26	6	48	86	29.140	250	14	A	51	75	06	B	50	80	12	C	49	80	08
	7	48	83	29.170	260	14	A	49	83	06	B	50	77	14	C			
	8	48	80	29.180	270	11	A	51	77	07	B	51	75	16	C	51	39	12
	9	49	74	29.190	260	12	A	51	72	06	B	52	72	12	C			
	10	49	74	29.200	270	15	A	52	69	09	B	52	71	14	C	52	75	11
	11	51	69	29.220	270	17	A	54	67	04	B	51	71	14	C	51	75	12
	20	50	68	29.350	250	10	A				B	51	71	08	C	51	75	02
	21	49	71	29.350	240	08	A	51	84	06	B	51	75	08	C			
	22	49	71	29.350	260	12	A	51	72	07	B				C	49	80	05
	23	48	74	29.360	290	12	A	49	73	02	B	50	74	03	C			

TABLE IV (Con't)

Date	Time EST	ESSA Weather Bureau, Airport					Field				Field				Field			
		T °F	Rel. Hum. %	P_0 in. Hg.	Wind Dir. ° Mag.	Wind Speed km	Pos	T °F	Rel. Hum. %	Wind Speed km	Pos	T °F	Rel. Hum. %	Wind Speed km	Pos	T °F	Rel. Hum. %	Wind Speed km
June 2	14	71	76	29.270	230	12	A				D				E			
	15	74	66	29.230	230	14	A	78	67	08					E	78	60	10
	16	75	64	29.220	230	16	A	78	63	07	D	78	63	04	E			
	17	77	62	29.195	250	17	A	78	49	12	D	76	64	10	E	76	62	12
	18	75	50	29.210	270	19	A	75	56	10	D	74	61	05	E			
	19	71	57	29.260	300	18	A	70	59	09	D				E	70	55	10
June 3	6	51	96	29.415	240	04	A			06	D	58	88	03	E	57	94	00
	7	56	93	29.435	240	07	A	61	84	06	D	61	84	03-10	E			05
	8	62	84	29.455	230	08	A	65	77	07	D				E			
	9	66	73	29.455	250	09	A	70	70	07	D	65	80	06	E			
	10	69	66	29.455	280	11	A	71	68	09	D	69	76	03	E	67	71	05
	11	70	64	29.465	280	12	A	75	64	08	D	72	69	06	E	70	68	05
	12	72	63	29.460	280	12	A	75	56	08	D	75	58	10	E	74	58	05
	13	75	56	29.445	280	10	A	77	59	05	D	77	52	03	E			
	14	77	55	29.435	280	10	A	77	61	05	D	78	53	08	E	78	53	05
	15	78	50	29.425	280	11	A	80	54	06	D	81	51	05	E	80	54	08
	16	80	49	29.415	290	9	A	81	51	06	D	83	52	05	E	81	48	05
	17	80	51	29.420	260	10	A	82	49	08	D	83	49	04	E	80	50	05
	18	80	49	29.410	250	09	A	79	45	07	D	82	55	06	E	81	48	00
	19	77	56	29.400	240	08	A				D				E			
	20	71	67	29.400	220	05	A	74	47	00	D	76	62	00	E	75	62	00
	21	68	73	29.405	210	05	A	69	79	00	D	70	72	00	E	72	69	00
	22	69	71	29.415	210	05	A	66	87	00	D	68	80	00	E	68	76	00
	23	65	78	29.420	220	03	A	65	85	00	D	67	75	00	E	67	80	00
	24	62	90	29.425	280	06	A				D				E			
June 4	6	58	93	29.465	200	03	A	62	89	00	D	65	75	00	E	65	75	00
	7	64	84	29.465	250	03	A	67	75	04	D	70	64	00	E	70	64	00
	8	69	71	29.485	300	02	A	72	69	06	D	74	58	00	E	74	58	00
	9	75	59	29.480	250	04	A				D	81	51	06	E	77	56	06
	10	79	49	29.475	070	02	A	80	57	04	D	82	55	02	E	81	58	03
	11	80	53	29.475	280	07	A				D	85	47	04	E	82	51	00
	12	81	49	29.465	200	07	A	85	48	06	D	86	50	02	E	85	47	02
	13	83	46	29.445	240	06	A	85	50	05	D	88	43	04	E	88	46	04
	14	84	46	29.425	280	06	A	87	43	07	D	88	46	04	E	85	44	03
	15	84	45	29.420	250	07	A	87	43	05	D	88	35	04	E			07
	16	84	45	29.405	250	10	A	87	47	05	D	88	40	05	E	88	46	00
	17	82	53	29.400	230	06	A	86	48	00	D				E	86	47	04
	18	84	48	29.390	250	06	A				D	85	53	02	E			
	19	81	51	29.390	290	05	A	84	49	03	D	84	49	00	E			
	20	80	51	29.385	290	04	A				D	80	61	00	E			
June 5	6	64	86	29.390	280	03	A	64	97	00	D	68	80	00	F	67	85	00
	7	67	84	29.390	290	04	A	68	90	00	D	73	69	00	F			
	8	73	71	29.385	050	04	A	73	86	00	D	78	67	00	F			
	9	7	65	29.370	150	05	A	78	75	04	D	80	61	02	F			
	10	80	60	29.280	210	06	A				D	80	61	02	F			
	11	82	58	29.360	180	08	A	80	75	03	D	83	58	00	F	80	72	05
	12	80	67	29.350	160	10	A	78	75	04	D	84	59	06	F	85	60	05
	13	82	59	29.340	160	09	A	78	77	09	D	85	53	03	F	83	52	06
	14	83	61	29.310	130	09	A	81	70	05	D	84	59	03	F	85	60	05
	15	84	59	29.290	110	08	A	77	79	00	D	81	61	06	F	83	62	04
	16	82	63	29.260	140	11	A				D	75	86		F			
	17	74	82	29.265	080	08	A	72	98	08	D	73	86	02	F	73	86	00
	18	73	84	29.245	120	13	A	70	98	10	D	71	81	04	F	69	90	00
	19	70	84	29.245	120	08	A				D				F			
	20	66	81	29.270	160	10	A	63	97	94	D	67	75	00	F			
	21	64	90	29.260	130	06	A	64	90	00	D	65	80	00	F	64	92	00
	22	64	90	29.240	310	04	A	63	89	00	D	65	80	00	F			
	23	63	90	29.250	130	06	A	62	97	00	D	65	80	00	F	63	89	00
	24	62	90	29.245	120	06	A				D				F			

TABLE IV (Con't)

Date	Time EST	ESSA Weather Bureau, Airport					Field				Field				Field			
		T °F	Rel. Hum. %	P_o in. Hg.	Wind Dir. ° Mag.	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn
June 6	6	66	94	29.220	240	06	A	70	90	00	D	68	90	00	F	67	90	00
	7	68	93	29.220	260	06	A	72	86	05	D	72	82	00	F			
	8	73	84	29.230	250	08	A	76	78	06	D	80	72	04	F	78	75	00
	9	78	77	29.230	250	08	A	81	69	00	D	82	65	02	F	79	71	00
	10	80	74	29.220	220	06	A	84	63	04	D	83	65	03	F	82	58	00
	11	82	68	29.240	240	09	A	83	65	07	D	82	69	03	F			
	12	68	76	29.330	300	17	A				D	68	90	00	F			
	13	67	81	29.250	060	08	A				D	72	82	00	F			
	14	75	74	29.220	060	06	A				D	79	68	00	F			
	15	79	69	29.210	210	06	A				D	83	55	02	F			
	16	80	65	29.170	210	06	A	84	51	07	D				F			
	17	80	65	29.170	200	08	A	82	61	09	D	83	51	02	F			
	18	77	69	29.150	200	06	A	79	66	04	D	80	64	02	F			
	19	74	76	29.160	190	07	A	75	76	08	D	77	71	02	F	76	74	00
	20	72	82	29.160	190	07	A	74	82	05	D	74	78	02	F	75	78	00
	21	71	87	29.160	190	10	A	74	83	02	D	76	74	02	F	73	86	02
	22	72	82	29.160	230	11	A	75	78	07	D	74	82	02	F			
	23	72	72	29.160	230	10	A	74	80	04	D	74	78	02	F			
	24	71	71	29.130	230	03	A	70	86	00	D				F			
June 7	1	66	76	29.170	220	10	A	70	77	06	D	70	68	00	F	75	74	03
	7	67	76	29.170	210	07	A	70	74	07	D	71	72	02	F			
	8	70	75	29.175	220	08	A	74	69	12	D	74	74	03	F	73	73	05
	9	72	76	29.160	210	09	A	80	66	08	D	77	71	03	F	75	66	05
	10	78	70	29.150	230	10	A	82	70	10	D	82	65	05	F	79	71	05
	11	80	69	29.150	230	12	A	84	66	12	D	86	63	06	F	81	76	05
	12	82	67	29.140	230	14	A	85	63	15	D	86	66	06	F	85	66	04
	13	83	67	29.110	220	15	A	87	62	12	D	87		04	F			
	14	84	67	29.080	210	15	A	87	57	08	D	88		06	F			
	15	84	58	29.050	220	15	A	88	56	10	D	86			F			
	16	81	57	29.015	230	15	A	85	57	07	D	85		04	F	85	57	08
	17	70	76	29.055	250	14	A	72	82	00	D				F			
	18	71	82	29.050	220	04	A	73	82	00	D	75	86	00	F	71	98	00
	19	72	76	29.015	200	06	A	78	71	03	D				F			
	20	72	66		210	09	A	74	69	03	D	73	82	00	F	76	70	00
	21	69	76	29.000	180	08	A	73	69	07	D	69	95	02	F			
	22	69	79	29.00	200	07	A				D	69	95	02	F	73	82	05
	23	69	84	29.060	240	08	A	72	86	00	D	69	95	00	F			
	24	70	84	29.060	260	06					D	69	95	02	F			
June 8	1	68	78	29.140	280	15	A				D				F			
	7	57	81	29.220	300	12	A	57	92	10	D	57	88	04	F	59	78	00
	8	60	83	29.230	300	12	A	59	90	08	D	58	89	06	F	58	83	00
	9	58	81	29.200	350	10	A				D	59	83	03	F	59	89	08
	10	60	78	29.270	310	10	A	62	74	11	D	59	83	07	F			
	13	61	72	29.300	360	12	A	62	74	12	D	57	94	07	F			
	14	61	70	29.310	360	12	A	61	68	10	D	57	94	08	F			
	15	60	70	29.330	360	10	A	63	69	07	D	57	94	07	F			
	16	63	67	29.330	010	10	A	64	70	06	D	57	94	07	F			
	17	64	63	29.330	340	11	A	65	63	08	D	61	89	08	F			
June 10	19	65	56	29.420	150	07	A	68	38	05	D				F			
	20	61	65	29.420	170	06	A	63	50	03	D	67	58	00	F			
	21	57	59	29.430	110	06	A				D	58	88	00	F			
	22	55	66	29.430	230	03	A	59	77	00	D			00	F			
	23	56	62	29.430	160	05	A	57	66	00	D				F			
	24	54	72	29.430	070	04	A				D				F			

TABLE IV (Con't)

Date	Time EST	ESSA Weather Bureau, Airport					Field				Field				Field			
		T °F	Rel. Hum. %	P_o in. Hg.	Wind Dir. ° Mag.	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn	Pos	T °F	Rel. Hum. %	Wind Speed kn
June 11	13	79	53	29.365	220	10	A	84	52	07	D				P	83		04
	14	80	49	29.355	220	11	A	82	48	12	D				P	82		08
	15	76	58	29.355	230	10	A	81	55	04	D				P			
	16	79	58	29.335	230	10	A	81	55	00	D				P			
	17	79	63	29.300	220	08	A	82	57	05	D				P			
	18	77	62	29.290	230	06	A				D				P			
	19	76	67	29.290	230	05	A	77	65	03	D			03	P			
	20	74	69	29.300	230	06	A	76	59	00	D			00	P	78		00
	21	72	73	29.300	220	05	A	75	70	00	D			00	P			
	22	70	82	29.300	230	06	A				D				P	73		00

TABLE V

AIRCRAFT NOISE AND DISTANCE DATA

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	B-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
A	5-17	1135	DC-9	1572	88.2	86.4	76.5	81.6	88.8	90.5	90.0	-2.3	15.0
		1141	727	1744	89.9	87.8	78.0	83.3	89.2	91.1	91.1	-1.2	19.0
		1143	DC-9	1438	88.7	87.0	77.4	83.0	89.4	90.8	90.7	-2.1	13.5
		1213	727	2521	88.2	82.4	74.3	78.6	83.8	83.8	84.5	4.4	23.0
		1218	DC9	1586	86.2	86.2	77.2	81.1	88.8	87.3	88.4	-1.1	15.0
		1219	727	2931	88.5	86.8	78.6	83.6	89.6	90.8	90.3	-2.3	20.0
		1222	BAC-111	1653	83.6	84.7	75.4	79.8	84.5	85.8	86.7	-1.4	16.0
		1405			81.9	82.3	71.9	75.5	80.9	81.6	82.0	0.3	23.5
		1411	DC-8		85.2	83.5	72.9	77.0	83.2	85.5	85.0	-0.3	18.0
		1432	707		82.7	83.6	73.9	77.7	83.2	83.9	84.1	-1.2	18.5
		1450	727	2252	86.7	85.4	75.6	80.4	86.4	87.4	87.5	-0.7	18.5
		1509	580	1975	83.2	83.2	73.0	75.7	81.0	84.1	84.2	-0.9	14.0
		1512	VC-10	1806	92.9	93.3	83.1	86.2	91.6	92.9	93.9	0	25.5
A	5-18	0611			105.4	98.0	91.4	100.1	104.4	109.8	105.4	-4.4	11.0
		0630			83.1	81.5	72.4	77.2	83.1	83.9	84.1	-0.8	19.0
		0645			90.0	87.6	78.1	84.0	90.7	91.7	91.4	-1.7	16.5
A	5-18	0724			99.7	94.1	84.4	92.3	98.5	101.3	100.0	-1.6	16.0
		0743			95.7	91.5	83.0	90.3	95.4	97.4	96.9	-1.7	15.0
		0747			86.1	84.0	73.1	79.1	85.1	86.0	86.6	0	10.5
		0750			106.7	99.9	91.9	100.6	105.4	109.3	105.8	-2.6	3.0
		0753			88.6	86.9	76.9	83.4	89.3	89.9	90.1	-1.3	13.5
		0757	707	2273	98.9	91.8	83.3	91.8	96.6	101.6	98.1	-2.7	13.0
		0801	720	1740	103.8	97.2	91.6	100.1	104.2	108.8	104.8	-5.0	11.0
		0803	727	2365	83.2	82.7	72.9	77.2	82.6	83.4	84.1	-0.2	22.5
		0805	727	1578	95.0	90.9	82.5	89.1	95.7	96.2	96.4	-1.2	19.0
		0810	DC-8	1577	98.5	94.2	84.6	92.0	97.3	99.7	97.7	-0.2	20.0
		0820	727	1545	95.9	91.3	82.8	89.9	96.4	98.3	97.5	-2.4	11.5
		0822	707	1616	99.5	94.3	83.3	90.0	96.1	100.4	98.9	-0.9	18.0
		0826	707	1966	95.5	90.7	81.9	88.9	94.5	98.6	96.0	-3.1	16.0
		0836	727	1526	99.6	95.0	85.6	91.9	99.1	100.8	100.3	-1.2	19.0
		0848	580	1680	89.5	87.9	80.8	82.2	88.4	91.7	90.1	-2.2	15.5
		0852	727	2305	84.9	83.2	72.3	77.7	84.0	84.4	84.7	0.5	26.5
		0901	737	2011	87.4	85.0	76.9	81.5	87.8	88.4	88.5	-1.0	15.5
		0904	707	2078	84.9	80.0	70.1	76.5	82.5	85.6	84.3	-.7	19.0
		0908	B-99		77.4	74.3	66.0	73.2	79.7	82.4	80.6	-5.0	9.5
		0910	720	1673	103.1	96.1	89.0	97.6	102.5	106.5	103.4	-3.4	11.5
		0933	727	1731	91.5	88.2	81.6	88.4	94.4	95.0	94.6	-3.5	12.5
		1011	580	1926	88.0	86.1	78.0	80.2	85.9	90.2	87.8	-2.2	14.5
		1015	727	2570	82.5	82.4	72.3	76.6	81.8	82.6	83.6	-.1	22.0
		1021	727	3056	80.6	80.4	70.2	74.7	79.7	80.4	81.2	.2	23.5
		1023	BAC-111	1954	82.0	81.2	73.0	77.2	82.6	83.6	83.6	-1.6	16.5
		1025	DC-9	2035	92.1	88.6	78.3	85.0	91.6	92.9	92.6	-.8	18.0
		1027	DC-9	1982	91.2	87.9	81.0	88.1	94.0	95.0	94.3	-3.8	13.0
		1037	727	1657	91.6	88.5	79.0	85.3	92.1	92.8	93.2	-1.2	16.0
		1039	BAC-111	1829	89.0	87.1	79.0	83.6	89.7	90.7	90.8	-1.7	17.5
		1040	707	1711	96.8	92.8	83.4	90.2	96.3	99.3	98.2	-2.5	13.0
		1043	DC-9	1652	94.0	90.0	80.3	87.5	93.8	94.6	94.7	-.6	16.5
		1047	720	1947	92.8	88.9	79.9	86.7	92.3	94.3	93.5	-1.5	16.5
		1053	737	1616	86.6	85.3	75.2	80.0	85.9	86.8	87.8	-.2	18.5
		1103	DC-9	1801	84.9	83.8	74.6	79.1	84.9	85.5	86.2	-.6	18.0
		1104	720	1535	105.9	99.2	92.2	100.9	105.5	110.4	106.5	-4.5	9.0
		1106			91.3	88.0	79.1	85.1	91.6	92.6	92.4	-1.3	16.0
		1116			101.2	94.4	88.0	96.3	101.2	105.2	102.0	-4.0	9.5
		1118	707	1469	94.0	90.7	81.7	87.8	94.0	95.9	95.5	-1.9	16.0
		1120	737	1274	97.9	93.8	83.7	90.3	97.2	98.8	98.6	-.9	20.0
		1124	707	1785	94.0	89.5	81.1	87.5	93.8	96.7	95.0	-2.7	13.0
		1133	580	1755	87.9	85.7	79.0	80.7	86.7	89.9	88.2	-2.0	14.5

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d ms
A	5-18	1134	580	1816	85.8	84.8	76.9	79.5	85.0	88.5	87.0	-2.7	13.0
		1136	DC-9	1781	92.5	88.2	78.2	84.9	91.4	92.7	92.2	- .2	20.0
		1146	DC-9	1753	92.2	88.5	81.6	89.2	95.4	96.9	95.8	-2.7	9.5
		1200	727	1567	94.4	90.7	82.1	88.3	94.9	95.6	95.8	-2.2	15.0
		1212	Jet-Com		88.2	86.2	77.6	82.7	88.4	89.7	89.7	-1.5	19.5
		1215	727	2326	84.4	84.0	74.6	76.8	84.4	84.4	85.0	0	21.0
		1219	DC-9	1354	94.8	90.3	82.2	90.3	96.7	99.3	97.9	-4.5	10.0
		1221	727	1526	96.6	92.7	83.6	89.5	96.4	97.9	97.9	-1.3	19.5
		1252	727	1681	90.2	86.9	77.3	83.7	90.1	91.5	91.1	-1.3	16.5
		1254	727	2053	88.6	85.7	76.8	82.7	89.3	90.5	90.1	-1.9	15.0
		1257	DC-9	1521	88.2	85.5	75.4	81.1	87.3	88.3	88.9	- .1	18.0
		1314	707	1940	95.2	90.7	82.7	90.0	95.3	97.0	96.2	-1.8	13.5
		1317	580	1880	83.1	82.4	75.2	76.8	82.5	85.7	83.6	-2.6	12.5
		1328	DC-9	1900	91.6	87.7	79.0	85.9	92.3	93.9	93.3	-2.3	13.5
		1409	727	1905	92.2	88.5	79.3	85.6	92.4	93.9	93.6	-1.7	15.0
		1400	707	2328	88.5	84.9	74.7	81.7	86.4	89.3	89.3	- .8	19.5
		1419	727	1711	95.5	91.7	83.7	89.8	96.7	98.4	97.8	-2.9	11.5
		1421	DC-9	1564	90.4	88.6	80.0	84.6	90.7	92.4	92.2	-2.0	14.0
		1427	VC-10	1570	95.3	93.8	85.5	89.9	96.1	97.1	97.0	-1.8	17.0
		1442	BAC-111	2000	89.2	87.9	79.9	84.5	90.0	91.2	90.7	-2.0	18.0
		1444	880	1442	95.6	95.3	85.6	90.1	95.6	96.4	96.7	- .8	15.0
		1454	580	1663	86.8	85.9	77.9	79.4	85.3	88.5	87.1	-1.9	14.0
		1500	727	1731	92.3	88.9	78.6	84.9	91.3	92.9	93.0	- .6	18.5
		1504	727	1639	93.6	86.7	77.1	83.4	90.1	91.5	91.2	-1.9	16.5
		1513	707	2139	101.1	100.1	90.1	94.3	100.3	101.0	101.3	.1	20.5
		1515	580	1580	86.1	85.0	77.3	79.7	85.6	88.1	87.0	-2.0	15.0
		1516	720	1651	99.5	94.1	85.9	94.0	98.8	102.2	99.8	-2.7	18.5
		1527	747	1032	93.3	90.9	81.4	86.2	92.9	94.3	94.0	-1.0	17.5
		1530	580	1540	85.0	82.8	74.9	78.4	84.5	87.1	85.7	-2.1	18.0
		1533	707	1630	92.6	89.9	78.9	84.2	90.9	93.3	93.6	- .7	18.5
		1536	727	1364	93.6	90.6	81.6	87.4	94.0	95.0	95.4	-1.4	18.5
		1538	720	1631	100.8	94.2	86.1	94.4	99.2	103.1	100.0	-2.3	12.0
		1539	727	1600	94.4	91.8	82.2	87.5	93.7	95.2	95.3	- .8	17.5
		1541	580	1628	87.9	86.7	81.4	83.6	88.1	91.6	89.9	-3.7	11.0
		1546	727	2416	82.5	82.2	71.4	75.7	81.8	82.7	83.7	- .2	22.0
		1556	737	2262	83.6	83.5	73.5	77.9	83.2	84.2	84.8	- .6	20.5
		1600	727	2230	83.8	82.8	74.0	78.7	84.3	84.3	84.9	- .5	22.5
		1610	DC-8	1626	96.4	92.1	82.7	89.9	95.1	97.6	96.0	- .6	18.5
		1614	707	1753	96.1	91.4	83.6	91.0	95.8	98.2	96.7	-2.1	14.0
		1617	707	2010	87.3	83.1	72.1	76.5	82.4	84.3	84.1	1.0	29.5
		1628	BAC-111	1860	82.3	81.0	69.6	74.3	80.5	82.1	83.3	.2	26.0
		1630	727	1933	85.5	83.8	73.0	78.0	84.0	84.9	85.5	.6	25.0
		1632	DC-9	1521	86.6	84.7	75.6	81.2	87.5	88.0	88.2	-1.4	15.0
		1640	727	1586	94.5	91.5	81.7	87.2	93.5	95.1	95.1	- .6	18.5
		1642	707	1515	97.5	92.4	84.4	91.9	97.2	99.3	97.9	-1.9	17.0
		1708	707	1818	100.3	93.5	87.2	95.7	100.6	105.5	101.6	-5.2	8.5
		1737	880	2280	74.9	75.6	68.2	71.9	77.2	79.7	79.0	-4.8	10.0
		1801	727	1432	86.9	86.1	77.8	82.2	88.2	90.0	88.7	-2.1	14.5
		1813	727	2100	83.7	83.1	74.0	78.3	83.8	84.7	84.5	-1.0	18.0
		1821	707	1644	97.7	92.2	83.9	91.1	96.5	100.1	97.5	-2.4	15.0
		1822	727	2320	87.1	84.9	75.2	80.6	86.9	87.8	87.9	- .7	16.5
		1829	737	1675	89.5	86.1	76.0	82.9	89.0	89.9	90.0	- .4	19.0
		1852	580	3291	80.1	78.3	69.4	72.4	78.3	81.0	79.6	- .9	26.0
		1855	B-99		69.6	62.1	60.2	67.3	71.0	72.4	77.2	-2.8	17.5
		1856	B-99		69.2	68.3	60.3	65.7	71.3	73.2	73.7	-4.0	11.5
		1858	580	1680	87.5	86.1	79.5	81.9	87.6	90.9	88.8	-3.4	12.5
A	5-18	1907	707	1581	105.1	98.3	89.6	98.3	103.4	108.0	104.3	-2.9	13.5
		1914	727	1657	92.7	88.7	79.2	85.7	92.4	93.7	93.5	-1.0	16.5
		1915	580	1645	87.3	86.3	79.9	82.5	88.5	91.2	89.4	-3.9	12.0

TABLE V (Con't)

Run	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
A	5-18	1916	707	1742	98.4	92.2	84.5	98.4	98.6	101.8	99.5	-3.4	10.5
		1918	727	1744	92.5	88.5	79.9	93.9	93.1	94.3	93.9	-2.8	15.5
		1920	727	1600	93.1	88.7	80.4	93.8	93.6	95.2	94.2	-2.1	16.0
		1929	727	2209	86.1	83.7	74.2	78.3	84.5	85.3	85.1	-2.2	18.5
		1932	580	1837	88.2	87.0	80.5	82.9	88.4	91.9	89.4	-3.7	12.5
		1934	727	1380	91.9	89.0	78.9	84.2	90.4	91.7	92.1	.2	25.5
		1937	720	1572	101.7	95.1	87.7	96.3	100.8	105.8	102.1	-4.1	9.5
		1939	707	1616	104.3	97.6	90.0	98.7	103.5	107.8	104.3	-3.5	12.0
		1942	B-80		70.2	69.6	60.9	66.3	71.3	72.2	73.1	-2.0	15.5
		1948	727	1837	81.3	80.2	71.9	75.7	81.3	83.5	82.9	-2.2	15.0
		1950	727	2495	84.7	83.8	74.2	79.0	84.8	85.5	85.5	- .8	21.0
		1953	DC-9	1939	90.4	87.3	78.4	84.8	91.6	93.2	92.6	-2.8	14.0
		2004			86.0	84.3	73.9	79.2	85.4	86.8	86.0	- .8	20.0
		2005			100.6	93.4	86.9	95.4	101.0	105.5	101.6	-4.9	8.5
		2008			70.5	70.2	59.0	64.1	69.2	70.6	72.1	- .1	24.0
		2016			93.5	88.1	77.2	84.6	91.1	94.7	92.6	-1.2	20.5
		2020			88.1	85.4	75.0	81.2	87.1	87.8	88.1	.3	22.5
		2026			92.4	87.8	79.3	86.7	93.3	95.0	93.8	-2.6	11.5
		2030			102.3	96.1	86.5	94.5	100.5	103.8	101.3	-1.5	18.5
		2033			79.5	75.5	66.2	73.5	80.0	82.8	82.2	-3.3	11.5
		2039			93.9	91.4	83.1	88.1	94.3	95.4	95.4	-1.5	19.0
		2041			94.6	90.4	80.5	87.6	94.1	95.1	95.2	.5	18.5
		2051			98.4	91.4	83.2	91.5	97.0	101.2	97.9	-2.8	15.5
		2102			104.7	97.7	90.9	99.5	104.6	107.8	105.3	-3.1	12.0
		2119			96.4	90.7	81.0	88.4	94.7	97.2	95.4	- .8	17.0
		2137			93.5	89.4	79.8	86.9	93.4	94.5	94.4	-1.0	16.0
		2139			94.7	90.8	80.0	87.3	93.7	95.1	94.8	- .4	22.0
		2141			95.1	90.6	82.8	89.8	95.9	96.9	96.8	-1.8	14.5
		2144			102.3	95.5	87.8	96.4	101.4	105.7	102.3	-3.4	10.5
		2151			78.3	74.2	64.2	70.2	75.5	80.1	78.2	-1.8	16.5
		2158			90.4	87.5	79.3	85.2	91.5	93.2	92.8	-2.8	11.5
A	5-18	2233			95.8	91.9	81.3	88.8	94.7	97.2	95.6	-1.4	19.5
		2247			100.8	93.8	85.8	94.4	99.6	102.5	100.3	-1.7	14.0
		2311			94.6	93.2	86.4	90.2	96.1	96.1	96.7	-1.5	19.0
A	5-19	0642	DC-9	1795	90.4	87.4	77.0	83.6	89.7	89.7	91.3	.7	22.0
A	5-19	0707	DC-9	2073	92.6	88.8	77.9	85.3	91.8	93.2	92.9	- .6	21.0
		0745	720	1508	99.5	92.5	84.2	92.8	97.2	102.0	98.7	-2.5	12.0
		0751	727	1468	96.4	91.8	84.0	91.7	98.0	99.3	98.9	-2.9	16.0
		0813	DC-8	1851	98.1	95.3	85.2	90.3	96.7	99.8	99.3	-1.7	19.0
		0834	707	2347	87.6	86.2	75.7	80.0	85.9	86.9	87.1	.7	26.0
		0838	727	3135	81.0	80.2	72.4	76.7	82.1	82.5	82.8	-1.5	22.5
		0846	DC-8	1679	100.8	94.9	83.3	91.1	97.5	100.6	99.0	.2	24.5
		0850	727	1744	93.9	89.6	81.2	88.1	94.5	95.8	95.4	-1.9	17.0
		0858	737	1967	85.9	83.7	76.4	81.3	87.4	88.1	88.0	-2.2	17.0
		0902	727	1415	93.2	89.6	79.7	86.4	93.0	94.1	94.1	- .9	17.5
		0908	BAC-111	2965	88.6	86.5	77.3	82.0	88.6	90.1	90.4	-3.5	17.0
		0924	Je -Com	3010	85.7	83.9	76.0	81.2	87.4	88.7	90.0	-3.0	8.5
		0928	727	1731	90.8	87.9	78.0	84.7	91.1	91.8	92.3	-1.0	17.5
		0940	Jet-Star		85.9	85.8	76.3	80.9	86.1	87.3	88.1	-2.4	16.0
		0957	R-90		78.3	74.7	67.5	74.9	80.6	81.9	82.4	-3.6	9.0
		0959	DC-9	1767	94.0	88.9	79.4	87.3	93.4	95.0	94.5	-1.0	16.0
		1008	580	1736	86.8	85.9	78.8	80.5	85.4	88.2	87.6	-1.4	16.0
		1012	727	1755	95.1	90.2	82.0	88.9	95.7	97.5	96.4	-2.4	14.0
		1534	DC-8	1679	99.2	92.7	83.6	91.8	97.8	101.2	98.0	-2.0	16.5
		1537	720	1517	103.4	96.5	88.8	97.4	102.5	106.8	103.1	-3.4	10.0
		1539	727	1645	93.4	89.4	80.0	86.3	92.9	94.0	94.2	- .6	20.0
		1541	720	1554	103.4	96.9	89.7	98.5	102.9	106.6	103.8	-3.2	12.5
		1543	727	1798	93.8	89.7	80.2	86.2	92.6	93.9	94.5	- .9	20.5
		1545	DC-8	1589	101.0	93.5	85.1	93.6	99.6	103.3	100.4	-2.3	18.0

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	e sec
A	5-19	1549	727	1657	94.6	90.6	81.7	88.2	95.2	96.9	96.1	-2.3	12.5
		1551	727	1876	92.0	89.4	79.9	86.9	91.1	92.2	92.5	- .2	18.0
		1552	BAC-111	1654	89.2	87.7	80.2	86.2	90.0	90.0	91.2	- .8	18.0
		1554	DC-8	1571	101.8	95.7	85.9	93.6	99.7	102.6	100.7	- .8	18.0
		1556	737	1351	95.3	90.9	82.6	89.9	96.3	97.6	96.9	-2.3	15.5
		1601	727	2209	90.0	87.2	76.6	82.5	89.2	90.8	90.6	- .2	20.0
		1609	727	1966	92.1	88.1	78.5	85.1	91.4	92.5	92.6	- .4	18.5
A	5-19	2119			98.3	93.4	84.8	92.5	97.4	99.4	98.4	-1.1	16.5
		2128			84.5	83.2	74.1	78.4	84.5	85.7	86.1	-2.2	16.0
		2138			96.4	92.3	83.5	90.0	96.5	97.4	93.0	-1.0	16.5
		2141			88.8	85.9	76.0	82.1	88.3	89.9	89.7	-1.1	17.5
		2143			84.6	84.4	75.4	79.5	85.0	85.7	86.0	-1.1	17.5
		2146			94.9	91.1	81.6	87.6	94.7	96.9	96.4	-2.0	14.0
A	5-19	2251			79.9	80.7	72.5	76.4	81.7	83.1	84.7	-3.2	15.5
		2148			100.5	95.3	88.2	96.3	100.1	104.1	101.6	-3.6	10.5
		2301			76.8	77.3	67.9	71.6	76.7	77.8	78.1	-1.0	23.0
		2321			78.6	78.1	68.2	72.4	78.1	79.2	79.5	- .6	26.0
		2336			92.9	86.1	77.6	81.2	87.6	91.0	89.6	-2.1	16.0
A	5-20	0832			92.4	89.4	81.8	87.9	93.0	95.6	94.4	-3.2	13.5
		0834			94.6	90.9	82.1	88.2	94.7	96.2	96.1	-1.6	16.5
		0836	BAC-111	1630	89.7	86.7	78.0	83.3	90.0	91.8	91.5	-2.1	14.5
		0855	727	1581	94.0	90.5	80.7	86.9	93.3	95.2	95.0	-1.2	18.0
		1004	BAC-111	1686	84.1	82.7	72.2	76.8	82.8	83.6	84.5	.7	23.0
		1013	727	1813	88.5	86.9	77.0	81.6	87.6	88.6	88.9	- .1	22.0
		1020	727	1528	95.1	91.3	82.6	89.0	96.0	97.6	97.2	-2.5	16.0
		1030	DC-9	1810	90.8	88.0	78.6	85.1	91.4	92.4	92.3	-1.6	16.0
		1048	737	1967	85.5	84.7	73.2	77.9	83.5	84.6	85.1	.9	28.0
		1051	720	1591	95.9	91.7	83.9	90.3	95.9	98.0	96.5	-2.1	15.5
		1102	DC-8	1429	96.2	91.7	83.5	90.2	96.6	99.0	97.5	-2.8	12.5
		1103	720	1418	104.4	97.6	91.3	99.9	104.5	109.3	105.4	-4.9	8.0
		1418	BAC-111	1536	89.1	86.6	77.0	81.9	88.1	89.0	89.7	.1	21.0
		1421	727	1826	88.7	86.6	76.7	82.4	88.5	89.8	90.9	-1.1	17.5
		1422	DC-9	1676	97.3	92.9	84.4	90.8	97.5	99.4	98.9	-2.1	16.0
		1436	707	1712	107.4	100.0	91.7	100.5	106.3	110.1	107.8	-2.7	10.5
		1443	VC-10	1606	95.9	94.2	83.5	87.6	93.3	95.9	95.0	0	22.0
		1448	727	1657	86.9	86.4	78.6	82.4	88.6	89.5	89.2	-2.6	15.0
		1452	T-39		83.6	82.0	73.4	77.6	83.9	85.3	84.6	-2.7	13.0
		1457	880	1612	97.8	97.1	88.3	92.4	98.1	98.6	98.7	-1.2	16.5
		1516	747	1559	99.2	95.6	86.6	91.9	98.4	100.7	99.3	-1.5	19.5
		1522	727	1554	86.4	84.6	74.8	79.3	85.5	86.8	87.3	- .4	19.5
A	5-23	1103	720	1694	100.0	93.1	85.8	94.1	98.9	103.5	100.0	-3.5	8.0
		1119	720	1621	93.1	88.4	80.9	88.1	93.2	96.0	94.3	-2.9	12.5
		1143	DC-9	2018	85.4	85.1	76.0	80.6	86.4	86.9	87.6	-1.5	19.5
		1147	DC-9	2111	87.4	87.4	78.6	82.8	88.5	89.1	89.6	-1.7	16.5
		1151	727	1785	85.3	84.9	77.4	81.4	87.2	88.3	87.8	-3.0	12.5
		1532	DC-8	1720	93.2	93.2	83.7	87.2	92.8	93.3	93.5	- .1	23.0
		1545	VC-10	1537	92.6	92.1	82.9	86.4	91.9	93.0	93.1	- .4	20.5
		1556	727	2017	89.9	88.8	78.5	83.2	89.1	89.9	90.8	0	23.0
		1558	DC-8	1702	95.7	91.9	82.9	90.2	96.4	99.4	97.1	-3.7	11.0
		1600	727	1657	87.4	86.3	78.2	82.5	88.4	89.1	89.3	-1.7	13.0
		1602	737	1691	80.1	80.0	70.8	75.3	80.8	81.4	81.7	-1.3	18.0
		1606	720	2417	90.4	85.8	76.6	84.1	89.6	94.7	91.1	-4.3	9.5
		1607	727	1902	86.8	85.5	75.4	80.6	86.7	88.2	87.5	-1.4	19.0
		1623	727	1933	83.1	82.7	72.2	76.1	81.6	82.9	83.1	.2	20.0
		1625	707	2079	93.3	90.3	82.7	90.1	94.6	97.5	95.3	-4.2	10.0
		1655	727	1568	95.5	93.7	84.5	88.9	95.4	96.6	96.8	-1.1	17.0
		1656	BAC-111	2098	76.5	77.9	69.1	72.6	77.6	78.3	78.4	-1.8	17.5
		1906			90.3	86.6	79.1	85.2	91.1	94.3	91.7	-4.0	11.0
		1809			85.1	84.1	73.0	77.2	83.1	84.7	84.8	.4	26.0
		1812			87.2	85.5	76.0	82.3	88.3	91.7	89.3	-4.5	10.5
		1814			89.0	87.1	77.9	82.8	88.9	90.1	89.5	-1.1	19.0
		1817			96.7	90.5	82.9	90.3	96.5	100.4	97.1	-3.7	10.0

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLEM PNdB	PNLC PNdB	D dB	d sec
A	5-23	1818			87.1	86.3	76.5	81.2	87.3	87.6	87.9	- .5	19.5
A	5-23	2009			89.3	89.6	79.8	83.5	88.9	89.8	90.4	- .5	19.5
		2044			77.6	77.0	68.3	73.0	78.6	79.0	80.1	-1.4	16.5
		2114			84.6	82.6	72.5	77.5	82.3	85.5	84.1	- .9	23.5
		2130			78.5	79.2	68.3	72.0	76.8	77.6	78.8	.9	23.5
		2140			77.9	77.6	68.5	73.7	79.2	80.0	80.6	-2.1	13.5
		2148			83.1	82.9	72.8	76.9	82.2	83.4	83.1	- .3	23.0
		2150			84.9	85.0	75.5	79.6	85.0	86.5	86.5	-1.6	21.0
		215			99.8	93.0	85.4	93.8	98.9	103.5	99.8	-3.7	9.5
A	5-23	2207			71.9	76.3	66.7	71.0	76.0	78.3	77.6	-6.4	4.5
		2219			87.8	86.1	76.1	81.1	87.3	89.1	88.6	-1.3	17 0
		2221			101.6	95.3	89.1	97.1	102.2	104.6	102.6	-3.0	11.5
A	5-24	1438	727	1757	98.2	92.8	83.3	90.8	97.8	99.5	98.9	-1.3	16.0
		1441	727	1450	97.3	92.7	83.3	90.7	97.6	99.0	98.5	-1.7	14.5
		1455	727	1633	88.7	86.5	76.7	82.6	88.1	89.8	90.0	-1.1	21.5
		1503	VC-10	1700	99.7	97.0	90.3	94.7	100.9	101.9	101.7	-2.2	18.5
		1515	747	1713	98.4	94.5	84.8	90.7	96.9	98.7	97.9	- .3	22.5
		1517	720	1673	107.4	100.7	93.2	102.0	106.7	111.0	107.6	-3.6	12.0
		1520	DC-8	1580	102.8	95.8	86.5	95.0	101.0	104.3	102.1	-1.5	17 5
		1527	DC-8	1700	101.6	97.2	86.2	92.5	99.3	102.8	101.5	-1.2	17.5
		1529	PILE II	1569	89.4	88.1	78.0	83.4	89.7	90.3	91.1	- .9	15.5
		1536	DC-8	1718	103.6	96.8	87.5	96.0	101.9	105.8	102.7	-2.2	15.5
		1540	727	1722	107.5	100.7	93.4	102.1	107.2	110.6	107.9	-3.4	11.5
		1548	727	1825	95.4	90.7	82.2	89.9	96.1	97.2	96.9	-1.0	15.0
		1601	737	1521	92.8	90.3	79.9	87.7	93.0	93.5	94.3	- .7	19.5
		1633	DC-9	1718	94.6	91.2	81.6	89.1	95.4	97.1	96.5	-2.5	14.5
		1606	727	1917	93.5	90.9	81.2	88.6	95.0	96.3	95.6	-2.8	13.0
		1637	727	1645	97.4	93.2	84.1	91.3	98.5	99.9	99.3	-2.5	13.0
		1638	DC-9	1473	93.4	94.1	84.4	90.5	97.8	99.8	99.8	- .4	20.0
		1641	BAC-111	1720	88.4	86.7	78.2	83.8	89.6	89.6	91.3	-3.2	14.0
		1644	707	1653	106.7	99.6	91.8	100.4	105.5	109.7	106.3	-3.9	13.5
A	5-25	0916			89.2	87.7	78.0	83.4	89.5	90.5	90.1	-1.3	20.0
		0923	BAC-111	1703	89.8	87.6	80.2	85.1	91.2	92.3	91.8	-2.5	19.5
		0928	707	1616	101.2	96.1	89.3	97.2	101.7	105.1	102.8	-3.9	10.0
		943	737	1674	94.0	90.1	80.4	87.2	93.4	95.3	94.8	-1.3	18.5
		946	727	1681	91.5	88.6	79.0	85.8	92.3	93.6	93.0	-2.1	15.0
		1015	727	2209	85.5	84.6	74.9	79.6	85.4	85.9	86.7	- .4	20.5
		1017	DC-8	1754	93.1	89.4	80.2	86.8	93.1	94.1	93.9	-1.0	17.0
		1046	DC-8	1555	100.6	96.5	85.4	91.9	97.5	101.9	101.0	-1.3	20.5
		1050	720	1864	90.7	87.1	77.1	83.1	88.9	90.7	90.7	0	20.5
		1055			86.5	83.8	74.9	81.2	87.1	87.8	88.2	-1.2	15.0
		1103	DC-9	1736	90.6	87.4	77.9	84.5	90.5	90.9	91.5	- .3	19.0
		1104	720	1752	101.6	96.4	89.7	97.6	101.7	105.4	102.2	-3.8	13.5
		1107	727	1589	96.8	93.3	84.0	90.6	97.0	98.2	98.0	-1.4	17.5
		1552			99.8	98.5	88.9	93.5	99.6	100.3	100.1	- .5	19.5
		1608	737	1469	100.5	95.8	87.4	95.1	100.6	103.8	101.5	-3.3	13.0
		1614	737	1578	93.2	89.8	80.5	86.9	93.6	94.8	94.8	-1.6	16.5
		1619	DC-9	1438	93.4	89.6	81.4	89.0	94.8	96.1	96.2	-2.7	13.0
		1629	727	1691	107.3	100.1	93.1	101.9	106.7	109.9	107.8	-2.6	12.5
		1629	707	1616	106.8	100.6	92.8	101.2	106.8	110.2	107.1	-3.4	22.5
		1632	DC-9	1395	97.8	93.0	84.0	90.1	97.0	98.7	97.8	- .9	19.5
		1639			96.1	92.2	82.7	89.5	95.9	96.8	97.0	- .7	17.5
		1641			87.2	86.0	77.3	81.8	87.5	88.0	88.5	- .8	18.5
		1648	DC-9	1427	92.0	88.9	79.6	86.2	92.6	93.8	93.2	-1.8	16.0
A	5-25	1900			105.9	98.8	92.9	101.5	105.0	110.6	106.7	-4.7	8.5
		1905			103.9	97.1	89.2	97.6	103.3	107.3	104.3	-3.4	12.0
		1912			90.2	88.1	79.2	84.7	90.9	91.4	91.8	-1.2	20.5
		1909			106.0	98.7	92.5	101.2	105.2	110.5	106.1	-4.5	8.0

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
A	5-25	1917			89.6	87.9	77.9	89.4	89.2	89.8	90.7	0	20.5
		1918			93.6	89.9	81.0	90.0	94.2	95.8	95.1	-2.2	14.5
		1918			97.8	94.4	85.1	91.8	98.3	99.6	99.5	-1.8	15.5
		1925			103.1	97.1	91.0	99.4	103.6	108.1	104.4	-5.0	9.0
		1926			105.4	98.6	92.5	101.3	105.2	110.7	108.4	-5.3	6.5
		1929			95.6	92.2	82.4	88.8	95.4	96.2	96.6	- .6	17.5
		1931			93.8	90.3	80.4	86.9	93.5	93.7	94.4	.1	21.5
		1938			95.9	92.1	83.2	88.4	95.3	96.4	95.9	-1.4	16.0
		2004			91.2	87.9	80.2	87.0	93.0	93.9	94.0	-1.7	13.5
		2005			91.2	89.4	79.6	85.3	91.7	92.2	92.9	-1.0	18.0
		2007			89.9	86.3	78.3	83.6	89.9	92.1	91.6	-2.2	19.0
		2142			85.9	84.4	75.3	79.2	84.9	86.3	87.9	- .4	25.5
		2143			94.4	91.0	82.8	89.8	95.7	96.7	96.5	-2.3	15.0
		2145			94.6	90.7	80.4	87.3	93.7	94.7	94.5	- .1	20.5
		2148			108.9	101.5	93.8	102.6	107.5	112.2	108.5	-3.3	15.0
		2151			83.9	83.6	74.5	81.3	87.[illegible]	90.5	88.9	-6.6	11.5

TABLE V (Con't)

Poe	Date	Time	A/C	Distance Pt.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
A	6-2	1501	727	1333	97.7	92.4	84.1	91.7	98.0	99.5	99.0	-1.8	15.0
		1514	727	1693	92.9	89.4	82.0	88.9	95.5	96.3	95.7	-3.4	11.5
		1523	747	1649	98.3	94.3	85.9	92.0	98.3	100.3	99.0	-2.0	17.0
		1527	DC-8	1624	98.8	94.7	86.0	91.1	97.5	100.8	100.3	-2.0	16.0
		1529	VC-10	1571	98.4	95.4	87.0	92.2	98.4	100.3	99.6	-1.9	18.0
		1531	720	1572	99.8	93.4	87.7	95.5	99.8	103.3	100.3	- .5	13.5
		1533	727	1365	87.0	83.8	74.3	80.3	86.8	87.6	87.8	- .6	23.0
		1535	BAC-111	1773	85.1	82.3	74.7	79.6	85.5	86.1	86.8	-1.0	15.5
		1537	580	1549	82.9	81.8	74.7	76.3	82.3	85.8	84.1	-2.9	10.5
		1539	580	1580	83.0	82.0	75.7	77.5	83.0	86.6	84.2	-3.6	10.0
		1540	DC-8	1612	93.0	87.4	79.9	87.5	93.0	95.1	93.8	-2.1	11.0
		1542	DC-8	1515	93.5	87.6	78.4	85.9	91.5	94.2	92.5	- .7	17.5
		1545	727	1622	95.0	90.7	82.3	89.0	96.1	97.5	97.1	-2.5	14.5
		1555	720	1717	103.5	96.9	87.7	96.1	101.2	104.8	102.7	-1.3	17.5
		1557	727	1578	93.8	89.6	81.1	88.7	94.8	95.7	95.4	-1.9	15.0
		1601	727	1528	95.3	90.8	83.8	90.2	97.2	98.2	97.7	-2.9	17.5
		1604	727	1557	93.3	89.5	81.8	89.2	95.6	96.5	96.0	-3.2	11.0
		1615	707	1590	107.3	99.9	93.7	102.5	107.1	111.4	107.6	-4.1	11.5
		1622	727	1341	96.5	92.6	83.3	88.6	95.6	97.2	97.5	- .7	19.0
		1627	DC-9	1652	98.6	93.2	84.1	91.2	98.4	99.8	99.8	-1.2	17.5
		1629	727	1611	95.5	90.7	83.8	91.3	98.0	99.6	98.3	-4.1	11.5
		1631	BAC-111	1703	89.8	85.8	77.1	83.8	90.5	92.1	91.3	-2.3	18.0
		1635	727	1568	94.4	89.3	82.5	90.5	96.5	98.1	97.4	-3.7	10.0
		1642	727	1639	97.2	91.8	86.9	94.7	101.1	102.4	101.6	-5.2	10.0
A	6-3	0636	720	1631	98.4	93.0	84.3	91.5	96.8	100.2	99.0	-1.8	15.5
		0639	DC-9	1824	91.0	87.9	78.5	84.0	90.4	91.2	91.7	- .2	15.5
		0645	727	1611	89.4	86.2	76.2	82.9	89.5	90.1	90.4	- .7	17.5
A	6-3	0704	DC-8	1686	95.9	91.0	83.0	90.3	96.1	98.9	96.8	-3.0	15.5
		0711	DC-9	1740	88.1	84.4	74.9	82.5	88.2	89.2	88.8	-1.1	16.5
		0747	DC-9	1689	97.4	92.2	82.9	90.0	97.5	99.1	98.7	-1.7	15.0
		0749	720	1611	103.3	97.7	91.6	100.2	103.7	108.2	105.0	-4.9	9.5
		0753	727	1589	94.3	89.5	81.2	88.7	95.2	96.6	96.1	-2.3	13.0
		0758	727	1609	90.3	87.2	78.1	83.9	90.3	91.3	92.2	-1.0	21.0
		2303	727	1568	92.8	88.7	80.1	87.5	94.1	95.6	94.9	-2.8	12.0
		1326	DC-9	1740	95.3	90.6	81.8	89.5	96.3	98.1	97.4	-2.8	13.5
		1328	737	1560	94.6	90.7	80.7	87.1	93.9	95.2	94.8	- .6	19.0
		1342	DC-9	1900	90.2	87.0	77.3	84.7	91.1	92.5	92.2	-2.3	11.5
		13 3	DC-9	1869	93.3	88.6	80.2	87.5	93.9	95.0	94.9	-1.7	15.0
		1355	737	2155	85.8	83.5	73.1	79.1	85.1	86.0	86.1	- .2	22.5
		1401	BAC-111	2263	85.4	84.4	74.7	79.1	84.4	85.5	86.2	- .1	23.5
		1403	DC-9	1785	88.3	84.8	75.7	82.7	88.6	89.3	90.0	-1.0	17.5
		1411	707	1626	105.9	99.3	92.2	101.0	105.7	108.7	106.3	-2.8	10.5
		1414	720	2310	97.3	90.6	82.7	91.0	95.7	99.6	96.8	-2.3	13.0
		1442	DC-8	2150	97.6	97.0	87.8	92.4	98.1	98.9	98.9	-1.3	16.0
		1455	727	1657	92.8	89.7	79.3	85.1	92.0	93.5	93.5	- .7	22.5
		1505	707	1712	103.7	96.6	89.1	97.6	102.7	106.7	103.6	-3.0	12.5
		1507	720	1728	97.2	94.0	85.2	90.6	96.4	98.6	98.5	-1.4	17.5
		1510	727	1856	88.2	85.8	76.4	82.7	89.0	89.8	90.1	-1.6	15.5
A	6-3	1900			101.5	95.0	88.6	96.7	101.6	105.7	102.6	-4.2	9.0
		1903			87.1	85.1	75.8	81.2	86.9	87.4	87.9	- .3	21.5
		1906			94.1	89.1	79.7	87.0	92.7	95.7	94.1	-1.6	17.0
		1910			92.2	88.2	79.2	86.3	92.6	93.5	93.4	-1.3	16.0
		1919			93.4	89.7	80.4	86.3	93.2	94.4	94.2	-1.0	20.5
		1920			94.4	89.9	80.6	88.1	94.4	95.5	95.2	-1.1	15.0
		1921			100.4	94.9	90.1	98.4	102.5	106.7	103.0	-6.3	7.0
		1924			87.2	84.7	75.1	81.7	87.9	89.0	88.4	-1.8	15.5
		1932			92.8	89.4	80.6	88.3	94.3	95.3	95.0	-2.5	14.0

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
A	6-3	1946			95.3	91.2	82.0	88.3	95.4	97.1	96.5	-1.8	20.0
		1954			98.2	91.8	84.2	92.4	98.1	101.3	98.5	-3.1	14.0
		1955			92.0	89.1	79.4	85.4	91.7	92.8	92.7	- .8	19.0
		1956			95.3	90.9	81.8	89.6	96.0	97.2	96.9	-1.9	15.5
		1957			98.1	93.8	83.7	90.5	97.5	98.9	99.4	- .8	17.0
		2004			91.5	89.7	77.6	82.4	88.6	89.4	90.3	2.1	27.5
		2010			105.0	97.6	89.8	96.6	103.7	106.9	104.2	-1.9	16.5
		2032			101.7	95.2	85.2	93.4	99.3	102.6	100.3	- .9	17.5
		2035			82.7	81.5	71.7	77.0	83.6	85.8	84.3	-3.1	15.0
		2047			101.2	94.9	85.3	93.6	99.3	102.1	100.4	- .9	13.5
		2049			95.8	91.2	81.7	89.0	95.3	96.1	96.5	- .3	17.5
A	6-4	0636	707	1702	99.6	93.9	87.2	94.6	99.8	102.9	100.9	-3.3	10.5
		0630	727	1536	94.8	90.1	81.4	88.4	95.0	96.4	95.8	-1.6	12.0
		0640	DC-9	1949	89.7	87.5	78.0	83.4	89.9	90.3	90.7	- .6	15.5
A	6-4	0717	720	2023	100.1	93.5	85.7	93.9	98.2	102.2	99.3	-1.1	14.5
		0747	DC-9	1740	89.7	87.2	77.3	83.9	89.8	90.4	90.7	- .7	18.0
		0751	727	1645	87.7	84.8	74.8	80.7	86.8	88.0	87.8	- .3	20.5
		0752	720	1554	98.6	93.8	88.3	95.5	101.4	104.4	100.9	-5.8	6.5
		0758	727	1541	93.6	89.2	81.2	88.4	95.1	96.9	95.6	-3.3	12.5
		0803	737	1448	91.5	88.5	77.8	84.5	90.2	91.3	92.0	.2	20.5
		0806	720	1591	97.3	92.2	84.1	91.2	96.9	99.1	97.9	-1.8	13.5
		0808	707	2156	99.8	93.5	85.5	93.8	98.5	102.6	99.6	-2.8	12.5
		0814	DC-8	2179	93.6	88.6	79.2	85.8	91.8	93.4	93.2	.2	20.5
		0822	707	1712	104.4	98.4	91.1	99.4	103.9	108.0	105.2	-3.6	12.0
		0827	727	1373	91.5	88.1	79.4	86.3	92.5	93.4	93.2	-1.9	14.0
		0834	727	1578	89.1	86.9	77.6	83.6	89.8	90.6	90.4	-1.5	16.5
		0835	727	1578	93.8	89.3	81.2	87.8	94.6	96.4	95.5	-2.6	14.0
		1540	BAC-111	1955	81.6	81.1	71.9	76.8	82.7	82.9	83.7	-1.3	16.0
		1546	727	1468	89.9	87.1	78.2	83.6	90.2	91.3	90.8	-1.4	18.0
		1550	727	1432	85.7	84.1	76.9	81.9	87.8	88.3	88.3	-2.6	12.0
		1551	727	1578	92.3	87.9	80.1	86.9	93.7	95.4	94.2	-3.1	11.5
		1553	727	1622	91.8	88.3	78.7	85.8	92.1	93.3	93.9	-1.5	13.5
		1600	727	1634	91.0	87.8	79.3	86.0	92.6	93.6	93.2	-2.6	11.5
		1602	737	1508	94.5	91.0	81.3	87.3	94.3	96.1	95.7	-1.6	16.0
		1108	DC-8	1634	96.5	89.6	82.9	91.9	96.2	99.0	96.2	-2.5	13.0
		1113	727	1611	93.7	88.7	81.1	88.1	95.0	95.9	95.6	-2.2	12.5
		1115	720	1466	98.7	92.8	84.2	92.1	97.8	100.3	98.6	-1.6	15.0
		1117	737	1521	89.1	85.5	76.2	82.7	88.7	90.3	89.8	-1.2	18.5
		1123	720	1475	98.0	91.9	85.5	92.9	98.1	102.4	98.9	-4.4	11.5
		1137	DC-9	1689	98.0	91.9	82.4	90.4	97.4	99.6	99.0	-1.6	17.0
		1149	707	1573	106.5	99.2	92.9	101.6	106.4	110.6	107.0	-4.1	11.0
		1155	727	1657	89.3	85.8	77.0	84.0	90.3	91.2	90.9	-1.9	15.0
		1231	727	1536	96.1	90.7	82.6	89.8	96.7	97.8	97.4	-1.7	15.0
		1248	727	1812	84.4	83.4	74.3	79.0	85.2	86.1	85.9	-1.7	18.0
		1408	BAC-111	1509	86.6	84.5	75.8	81.2	87.7	88.8	88.4	-2.2	12.5
		1420	727	1611	89.6	86.6	78.1	85.0	91.4	91.4	92.0	-1.8	14.0
		1423	727	1622	91.5	88.0	79.1	85.9	92.6	93.1	93.3	-1.6	14.5
		1424	DC-9	1652	97.3	91.5	83.2	91.1	98.0	100.2	99.4	-2.9	16.0
		1431	727	1645	93.0	88.4	81.0	88.1	94.9	96.1	95.3	-3.1	14.0
		1433	880	1581	89.9	88.3	78.6	83.5	89.6	90.3	91.0	- .4	19.0
		1505	720	1611	97.7	92.6	82.1	88.8	94.6	98.3	98.1	- .6	18.5
		1507	707	1842	100.2	93.6	87.5	95.7	100.3	104.0	101.2	-3.8	14.0
		1723			101.3	95.6	89.9	98.0	103.0	106.0	103.4	-4.7	8.5
		1726			89.5	85.9	76.8	83.0	88.2	90.7	91.5	-1.2	17.0
		1729			91.3	88.0	78.4	84.6	91.3	92.0	92.4	- .7	18.0
A	6-5	2009			93.5	89.0	80.7	88.5	94.6	95.4	95.2	-1.9	14.5
		2012			99.2	94.4	84.7	92.1	99.0	100.7	100.8	-1.5	15.5
		2014			95.5	93.8	84.4	89.3	95.3	95.9	96.4	- .4	21.0
		2016			100.3	94.5	84.4	92.1	97.9	100.7	99.3	- .4	19.0
		2020			97.0	92.6	81.9	88.9	94.8	96.3	96.7	.7	21.0
		2023			91.1	88.1	78.6	84.7	91.5	92.5	92.3	-1.4	18.5
		2025			103.2	95.7	88.4	97.1	102.3	106.4	103.1	-3.2	13.5
		2033			100.5	95.7	84.8	92.2	98.9	100.6	101.5	- .1	24.5

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
A	6-5	2043			107.2	100.2	94.1	102.8	106.7	111.3	107.4	-4.1	9.0
		2048			96.7	91.2	83.2	91.1	97.7	99.8	98.6	-3.1	13.0
		2100			87.1	84.1	73.0	78.9	85.2	88.0	87.5	- .9	23.0
		2104			99.1	93.2	86.9	94.5	99.3	102.6	100.0	-3.5	12.5
		2114			101.8	96.3	84.8	93.0	99.0	101.6	100.2	.2	20.0
		2119			101.4	94.3	85.8	94.2	100.4	103.7	101.2	-2.3	16.0
		2125			102.3	95.4	89.9	98.6	102.7	107.9	103.8	-5.6	8.0
		2138			95.7	90.7	83.0	90.4	96.1	98.9	97.0	-3.2	13.0
		2140			91.6	87.8	78.6	85.8	92.2	93.0	92.9	-1.4	14.5
		2142			96.1	91.3	80.6	88.1	94.5	95.9	95.8	.2	23.0
A	6-5	2208			96.6	91.5	82.0	89.5	96.3	98.0	97.7	-1.4	16.0
		2222			90.9	86.0	76.8	83.5	89.2	91.2	89.8	- .3	19.5
A	6-6	0712			90.2	86.5	78.4	85.7	91.7	92.3	92.2	-2.1	15.0
		0745			90.2	86.4	78.6	85.7	92.0	92.5	92.6	-2.3	12.5
		0749			83.5	80.2	70.9	76.4	82.9	84.3	83.9	- .8	18.5
		0753			94.1	89.6	80.4	87.7	94.1	95.2	95.1	-1.1	15.0
		0800			96.4	91.3	82.6	89.9	95.5	98.1	96.4	-2.7	17.0
		0825			100.8	96.2	86.3	91.6	98.0	102.0	101.2	-1.2	17.0
		0827			96.2	91.3	83.6	91.1	96.8	99.4	97.4	-3.2	13.5
		0830			98.6	92.9	85.6	93.2	98.3	101.5	99.1	-2.9	13.5
		0837			83.0	81.0	72.5	77.1	83.2	84.5	84.6	-1.5	15.0
		0846			82.4	81.5	71.2	75.9	81.6	82.1	82.4	.3	20.0
		0849			90.1	86.7	77.4	84.5	91.0	92.3	91.9	-2.2	16.0
		0851			86.8	84.5	75.3	80.3	86.3	87.0	87.6	-1.2	16.0
		1644	BAC-111	1933	79.9	79.7	70.7	75.2	80.6	81.7	82.9	-1.8	12.0
		1654	DC-8	1740	101.4	94.9	87.5	96.3	102.0	105.3	102.7	-3.9	8.5
		1656	727	2607	82.9	82.5	70.5	75.2	80.8	81.3	82.7	1.6	26.0
		1711	720	2373	88.4	84.1	73.4	80.4	86.1	89.0	87.8	- .6	23.0
		1714	DC-9	1795	90.8	87.5	77.4	84.1	90.3	90.7	91.6	.1	17.0
		1719	BAC-111	1811	91.3	88.6	79.6	85.4	92.0	92.5	93.0	-1.2	17.5
		1721	727	1841	88.5	85.7	76.4	82.7	89.0	90.4	90.5	-1.9	14.5
		1700	BAC-111	1811	85.0	83.6	74.2	79.2	85.1	85.6	85.8	- .6	16.5
		2000			96.2	89.3	80.4	88.4	94.6	96.0	95.3	.2	13.5
		2007			99.4	97.6	87.7	93.2	99.4	100.1	100.1	- .7	18.5
		2010			93.3	89.6	80.1	87.1	93.5	94.4	94.5	-1.1	19.0
		2021			95.8	90.2	82.2	90.0	95.6	98.0	96.3	-2.2	14.5
		2025			87.8	84.9	75.4	81.5	88.2	88.7	88.9	- .9	21.0
		2032			88.8	86.7	78.0	83.1	89.6	90.1	90.5	-1.3	15.5
		2036			96.7	92.1	83.2	90.5	97.1	98.0	98.3	-1.3	14.5
		2038			89.3	85.7	77.7	85.1	91.0	91.8	91.6	-2.5	16.0
		2041			94.5	89.5	80.7	88.3	95.1	97.3	96.1	-2.8	13.5
		2102			93.5	89.0	79.4	86.7	93.4	94.8	94.4	-1.3	18.5
		2103			85.9	84.5	73.6	78.7	84.4	85.6	85.6	.3	28.0
		2118			101.6	94.9	87.3	95.5	100.1	103.2	101.2	-1.6	14.5
		2133			101.1	95.1	86.7	94.5	99.8	102.1	100.4	-1.0	18.0
		2141			103.2	96.3	89.2	97.8	102.3	106.6	103.2	-3.4	13.5
		2144			97.1	92.6	82.7	90.3	96.9	98.1	98.2	-1.0	18.0
		2147			97.5	92.4	83.5	91.3	97.6	97.6	98.5	- .1	18.5
		2149			100.1	95.0	85.6	92.8	100.0	101.6	101.3	-1.5	18.0
		2153			92.9	90.0	80.0	85.7	91.7	91.7	93.5	1.2	25.0
A	6-6	2203			90.0	86.8	77.1	83.4	89.8	90.0	90.4	0	22.5
		2205			89.0	86.8	77.1	82.2	88.3	88.8	90.2	.2	18.5
A	6-7	0617	720	1434	102.7	96.1	89.5	98.0	103.1	107.0	103.9	-4.3	12.0
		0643	580	1612	87.4	85.8	79.6	81.4	87.1	89.8	88.6	-2.4	14.0
		0648	DC-9	1701	90.9	88.0	79.1	86.3	92.3	93.0	93.3	-2.1	14.5
		0654	580	1646	87.3	85.9	78.2	81.0	87.2	90.5	88.6	-3.2	14.0

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
A	6-7	0703	580	1717	87.6	85.5	76.8	79.4	85.6	89.5	87.1	-1.9	17.5
		0707	DC-8	1664	99.0	92.7	83.3	90.8	96.7	99.9	98.4	- .9	16.5
		0745	DC-9	1781	92.8	88.1	79.3	86.9	93.1	94.3	94.0	-1.5	17.5
		0754	720	1554	103.8	97.7	92.4	101.1	104.2	108.8	105.7	-5.0	8.0
		0756			91.7	88.4	79.0	84.8	91.6	92.8	92.8	-1.1	21.0
		0800	720	1764	100.5	94.7	87.4	95.5	99.5	102.9	100.6	-2.4	16.5
		0803	727	1731	88.9	86.0	76.6	83.3	89.5	90.4	90.6	-1.5	15.5
		0807	707	1663	104.1	97.5	92.8	101.4	105.4	110.0	106.3	-5.9	8.5
		0813	737	1534	88.7	86.1	75.0	81.7	87.7	88.2	89.2	.5	23.0
		0819	707	1582	96.6	93.9	85.7	93.0	98.7	99.9	99.6	-1.3	14.0
		0828	Lear	1621	91.2	89.9	81.0	85.3	91.1	91.8	93.4	- .6	20.0
		0821	720	1332	109.0	101.8	95.8	104.6	109.1	113.8	109.6	-4.8	8.5
		0830	707	1890	101.3	95.5	87.9	96.2	100.5	104.3	101.7	-3.0	15.0
		0832	DC-8	1680	97.5	92.1	81.7	89.0	95.6	99.4	97.7	-1.9	16.5
		0835	727	1357	97.0	91.9	83.0	90.0	96.0	98.1	98.0	-1.1	15.5
		0844	727	1333	82.6	81.0	70.2	75.3	81.4	82.4	82.6	.2	24.0
		0845	580	1859	86.7	84.6	77.3	79.6	85.5	88.4	87.0	-1.7	16.5
		0849	580	1596	87.8	86.3	78.3	80.8	86.3	89.1	88.9	-1.3	14.0
		0851	DC-9	1701	92.4	89.0	78.9	86.3	92.9	94.0	93.6	-1.6	16.5
		0854	737	1534	94.6	90.6	79.8	87.3	93.6	94.9	94.5	- .3	23.5
		0855	727	1871	88.7	85.5	76.9	82.7	89.-	89.7	90.3	-1.0	18.0
		0912	BAC-111	1703	86.1	83.8	75.7	80.2	86.7	87.8	87.7	-1.7	17.0
		0924	BAC-111	1654	92.0	89.0	80.9	86.6	93.3	94.8	94.0	-2.8	15.5
		0925	727	1478	91.1	89.2	79.6	84.7	91.2	91.8	92.1	- .7	16.0
		0934	720	1591	101.7	96.2	91.2	99.5	102.8	106.5	103.9	-4.8	9.0
		0936	727	1657	93.4	88.7	81.5	88.6	95.3	96.7	95.8	-3.3	13.5
		0941	VFC	2334	82.5	80.3	72.0	76.7	81.7	83.9	83.6	-1.4	17.5
		0944	737	1560	87.9	85.2	75.4	81.3	87.5	88.3	88.8	- .4	18.0
		1003	580	1795	86.5	85.3	78.5	80.2	85.9	89.2	87.7	-2.7	12.5
		1011	DC-9	1701	97.5	91.8	83.6	91.2	98.1	99.8	98.9	-1.3	14.5
		1012	727	1357	93.8	90.1	81.2	87.6	94.9	96.5	96.0	-2.7	18.0
		1015	BAC-111	1509	91.3	88.5	81.4	86.6	92.9	93.4	94.0	-2.1	17.0
		1019	727	1381	91.1	87.5	78.3	84.8	91.6	92.5	92.3	-1.4	18.5
		1023	580	1549	88.5	86.6	80.2	82.5	88.4	91.7	89.5	-3.2	12.5
		1027	DC-9	2192	88.5	85.9	77.9	84.1	90.5	90.5	91.0	-2.0	15.-
		1033	727	1450	94.8	90.4	82.2	89.5	96.3	97.7	97.0	-2.9	12.5
		1035			93.7	89.3	79.9	87.4	93.9	94.5	94.7	- .8	20.-
		1037	DC-8	1572	98.6	93.2	83.0	91.0	97.0	101.0	99.5	-2.4	15.5
		1040			90.0	86.5	77.2	83.7	89.8	91.7	91.3	-1.7	16.5
		1050			94.3	89.7	81.5	88.1	95.4	97.0	96.1	-2.7	14.0
		1052	707	1774	102.4	95.3	87.5	95.8	101.7	105.0	102.2	-2.6	16.5
		1054	737	1574	94.8	90.1	80.8	88.8	94.6	95.7	95.7	- .9	18.0
		1102	DC-9	1802	89.9	86.3	77.1	84.6	90.6	91.1	91.1	-1.2	15.5
		1104	727	1611	96.7	91.6	83.1	90.4	97.3	98.8	97.9	-2.1	13.5
		1106	DC-8	155-	102.8	95.6	87.5	94.1	102.0	105.5	102.7	-2.7	14.5
		1108	727	162	101.5	96.6	86.2	92.9	100.3	102.0	101.9	- .5	19.0
		1110	720	1517	103.9	97.6	92.8	101.3	105.0	109.1	105.9	-5.2	8.0
		1115	DC-8	1680	86.1	84.1	76.5	79.9	86.5	88.9	87.6	-2.8	13.0
		1120	707	1796	105.5	98.1	91.5	100.4	105.1	109.1	106.4	-3.6	11.0
		1125	737	1460	91.7	88.1	78.0	84.8	90.9	92.0	92.4	- .3	17.5
		1127	580	1564	88.8	86.6	81.0	83.8	89.9	92.9	90.8	-4.1	10.0
		1129	DC-9	1701	92.2	88.5	77.7	84.3	90.8	91.5	92.3	.7	24.0
		1138			86.5	84.3	73.9	80.4	86.0	87.2	88.4	- .7	19.0
		1144	727	1634	88.8	85.9	77.2	84.1	90.2	90.9	90.8	-2.1	16.0
		1151	DC-9	1740	93.6	89.3	80.6	88.1	94.5	95.8	95.5	-2.2	13.0
		1156	727	1669	99.1	94.1	86.0	92.0	99.2	100.8	100.4	-1.7	14.5
		1201	DC-9	1689	95.9	90.8	82.7	90.4	96.7	98.1	97.1	-2.2	15.0
		1209	DC-9	1740	98.5	93.1	83.6	91.1	97.8	99.8	99.4	-1.3	18.-
		1210	727	1547	97.4	92.3	84.8	92.9	99.7	101.3	100.4	-3.9	12.0

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
A	6-7	1217	Jet Star	1622	94.1	92.6	86.3	91.6	97.3	98.0	98.1	-3.9	11.5
		1220	727	1557	94.3	89.9	84.4	91.5	98.0	99.3	98.5	-5.0	9.5
		1225	727	1657	97.3	92.5	84.8	92.3	98.6	99.1	99.1	-1.8	14.5
		1232	DC-9	1701	95.4	90.3	81.5	89.9	96.5	98.5	97.4	-3.1	13.0
		1237	BAC-111	1654	90.2	86.7	78.0	84.6	90.8	91.3	91.7	-1.1	16.0
		1240	580	1505	91.1	88.8	81.8	83.9	90.4	93.6	92.4	-2.5	12.5
		1253	727	1706	92.8	88.9	80.5	88.2	94.3	95.2	95.1	-2.4	13.5
		1311	580	1463	88.8	86.6	79.0	81.7	88.0	90.6	89.7	-1.8	12.5
		1324	DC-9	1932	90.8	86.6	78.8	85.5	92.1	93.7	93.1	-2.9	15.0
		1325	580	1681	86.1	84.2	78.9	81.0	87.7	91.0	88.2	-4.9	11.0
		1326	DC-9	1932	88.9	85.5	76.5	83.7	90.0	90.6	90.4	- .7	17.5
		1329	737	1508	90.0	86.2	78.7	86.0	92.0	92.3	92.2	-2.3	15.5
		1340	DC-9	1839	92.8	88.5	80.7	87.9	94.3	95.1	95.2	-2.3	12.0
		1345	727	1441	84.6	86.6	76.9	82.4	89.1	89.4	90.0	-4.5	19.5
		1349	DC-9	1731	92.0	87.8	78.3	85.8	91.9	92.5	93.0	- .5	21.0
		1351	580	1580	88.6	86.5	80.7	82.7	89.0	92.1	89.9	-3.5	10.5
		1355	T-39	1784	81.1	79.0	70.7	75.8	81.1	84.6	83.1	-3.5	11.5
		1401	DC-9	1735	92.1	88.1	80.1	87.4	93.7	94.2	94.2	-2.1	13.5
		1403	DC-9	2036	91.3	87.1	78.2	85.6	92.0	93.2	93.1	-2.9	14.0
		1408	727	1622	94.2	89.4	81.5	88.8	95.3	96.7	95.9	-2.5	14.5
		1414	DC-8	1661	102.9	95.8	89.9	99.0	104.1	107.5	104.5	-4.6	9.0
		1416	707	1672	105.0	98.7	91.5	100.2	105.1	109.9	105.8	-4.2	7.5
		1418	737	1574	95.6	90.9	82.1	89.2	95.3	96.2	96.2	- .6	13.5
		1419	727	1681	93.0	88.9	81.2	88.7	94.9	95.7	95.5	-2.7	12.5
		1421	DC-9	1839	89.5	85.0	76.1	83.7	90.2	91.8	90.7	-2.3	15.5
		1423	DC-8	1867	97.8	92.0	82.7	91.0	97.3	99.9	98.0	-2.1	13.0
		1425	B-80	2536	85.3	80.8	71.1	79.0	85.5	87.3	87.5	-2.0	17.0
		1430	727	1657	97.9	93.4	83.6	90.5	97.8	99.3	99.4	-1.4	17.0
		1432	DC-9	1810	92.0	88.3	79.8	87.3	93.8	95.0	94.8	-3.0	13.0
		1437	DC-8	1751	99.2	92.9	84.7	93.1	99.0	102.4	99.6	-3.2	14.0
		1444	DC-9	1395	90.2	87.0	77.9	83.7	90.4	90.7	91.9	- .5	16.5
		1448	727	1381	93.8	89.2	83.0	90.3	96.8	98.2	97.1	-4.4	11.0
		1458	Lear	1720	84.5	83.3	74.7	79.7	85.7	86.3	86.8	-1.8	14.5
		1503	VC-10	1579	97.4	94.5	84.1	90.0	96.0	97.9	97.9	- .5	17.5
		1507	727	1785	87.6	85.8	78.3	82.9	89.1	89.7	90.0	-2.1	14.0
		1509	727	1578	93.6	89.6	82.8	90.3	96.7	96.0	96.9	-4.4	10.0
		1511	727	1622	93.0	88.9	81.4	88.3	94.7	95.8	95.3	-2.8	13.5
		1513	580	1564	84.4	82.4	74.2	77.6	83.7	86.0	85.5	-1.6	14.5
		1515	B-80	2290	79.6	75.5	66.6	75.5	81.5	83.3	83.3	-3.7	11.5
		1516	BAC-111	1670	88.0	85.6	77.6	82.7	88.0	89.5	89.0	-1.5	18.5
		1518	T-39	1649	84.7	83.8	75.6	78.4	84.6	86.3	86.2	-1.6	15.0
		1520	580	1463	89.7	88.2	84.6	86.8	92.3	96.0	93.0	-6.3	6.5
		1524	707	1635	106.5	99.4	92.8	101.7	106.1	110.8	106.7	-4.3	8.5
		1526	720	1631	98.7	93.4	83.7	90.6	97.0	101.1	99.3	-2.4	17.5
		1529	747	1885	96.6	92.8	82.5	88.7	95.2	97.6	96.1	-1.0	20.5
		1530	DC-9	1520	86.2	84.2	75.9	81.4	87.6	87.6	88.1	-1.4	20.5
		1533	580	1505	87.0	85.5	76.8	79.3	85.5	88.1	87.0	-1.1	18.0
		1537	DC-8	1726	97.1	90.8	83.8	91.7	97.4	100.0	97.6	-2.2	15.0
		1540	727	1365	91.0	87.4	77.9	83.8	90.5	91.7	91.7	- .7	19.5
		1544	727	1669	93.7	89.6	80.4	87.8	94.3	94.7	95.0	-1.0	15.5
		1545	720	1763	98.9	92.8	87.2	95.3	99.0	101.4	100.0	-2.5	15.5
		1547	BAC-111	1686	89.7	85.8	78.2	85.0	91.7	93.5	92.6	-3.8	12.5
		1549	DC-8	1581	98.4	91.7	82.7	90.9	96.8	99.7	97.8	-1.3	17.5
		1551	580	1717	88.5	87.3	81.3	82.8	88.6	91.6	89.8	-3.4	12.5
		1553	720	1662	101.2	94.8	89.1	97.6	102.7	105.9	103.3	-4.7	9.0
		1554	727	1578	92.3	88.4	79.8	87.1	93.5	94.6	94.3	-2.3	15.5
		1556	727	1758	94.7	90.3	81.1	88.2	95.0	95.6	96.0	- .9	17.5
		1612	737	1484	89.5	86.1	77.4	84.5	90.7	92.1	91.2	-2.6	17.5
		1614	DC-9	1594	98.0	92.9	85.4	92.9	99.8	101.3	100.6	-3.3	12.5

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PKLC PNdB	D dB	d sec
A	6-7	1617	727	1589	97.5	92.5	83.8	90.6	97.7	99.2	99.1	-1.7	15.0
		1622	707	1830	97.0	90.9	84.4	91.7	97.3	101.1	97.7	-4.1	9.5
		1625	727	1731	94.2	89.9	81.0	88.4	94.6	94.6	95.6	- .4	19.0
		1627	727	1526	91.2	88.6	79.5	85.8	92.3	93.0	93.1	-1.8	14.5
		1629	BAC-111	1870	90.1	88.4	79.7	84.9	91.1	91.7	92.5	-1.6	17.5
		1633	DC-9	2036	93.3	88.4	81.0	88.6	95.3	96.7	95.6	-3.4	12.5
		1634	720	1706	101.6	95.8	91.8	100.2	103.5	107.8	104.6	-6.2	7.5
		1644	727	1459	99.1	94.2	85.9	92.7	100.0	102.0	102.0	-2.9	13.5
		1707	727	1208	96.8	92.1	84.5	92.1	98.6	100.0	99.7	-3.2	15.0
		1728	707	1672	101.2	96.0	89.3	97.2	101.1	103.8	102.0	-2.6	13.5
		1729	707	1743	105.9	98.8	90.8	99.4	104.6	108.8	105.6	-2.9	13.0
		1731	727	2000	87.4	85.4	75.6	81.3	87.4	88.7	88.3	-1.3	21.0
		1732	DC-9	2073	93.3	88.6	79.4	86.5	93.3	94.6	94.3	-1.3	15.5
		1735	Jet Star	1806	90.8	89.8	81.5	85.8	91.5	91.5	92.7	- .7	17.5
		1736	BAC-111	1830	92.0	89.3	79.9	85.0	91.3	92.0	92.9	0	23.0
		1741	707	1617	99.2	93.3	87.1	94.9	99.2	101.9	99.9	-2.7	14.5
		1743	BAC-111	1720	91.6	70.4	81.7	86.8	92.6	93.3	93.3	-1.7	16.0
		1746	DC-8	1652	100.7	96.2	85.9	91.3	98.1	100.8	100.1	- .1	21.0
		1755	720	1491	104.7	98.2	92.3	100.9	105.1	109.5	106.0	-4.8	8.0
		1757	737	1676	88.9	85.4	76.4	83.6	89.4	90.2	90.0	- .3	17.5
		1800	727	1536	96.2	91.7	83.1	90.9	97.3	98.7	98.0	-2.5	14.5
		1809	727	1415	96.4	91.8	84.0	91.5	97.7	94.4	98.1	2.0	14.5
		1811	DC-9	1839	98.0	93.1	83.4	90.6	97.4	98.6	98.3	- .6	18.5
		1819	727	1333	97.4	94.5	85.2	90.3	97.1	98.1	98.6	- .7	23.0
		1820	580	1549	88.7	87.4	80.8	83.3	88.9	92.4	89.6	-3.7	11.0
		1841	707	1565	109.0	101.3	96.8	105.6	109.7	115.2	110.5	-6.2	7.0
		1844	BAC-111	1623	87.7	86.1	76.6	81.6	87.6	88.3	88.9	- .6	17.5
		1845	737	1448	89.8	85.9	75.8	82.4	89.3	91.5	90.8	-1.7	16.0
		1847	580	1549	88.4	87.7	80.5	82.1	87.6	90.3	89.0	-1.9	14.0
		1850	737	1460	97.2	92.2	81.3	88.7	95.3	96.3	96.8	.9	24.5
		1904	720	1483	101.3	95.4	87.9	94.4	99.5	103.1	100.6	-1.8	17.5
		1905	707	1712	102.3	95.8	91.9	100.4	104.6	109.0	105.1	-6.7	6.5
		1907	580	1904	87.5	86.0	79.2	81.6	87.6	90.8	87.9	-3.3	11.0
		1910	580	1534	89.5	88.2	80.8	83.3	89.1	92.3	90.4	-2.8	12.0
		1914	727	1389	91.0	88.3	78.4	84.5	90.9	91.9	92.0	- .9	18.0
		1916	DC-9	1652	93.5	89.6	81.0	88.7	94.6	95.5	95.4	-2.0	15.5
		1918	580	1580	88.8	88.5	83.4	85.0	90.7	94.5	91.5	-5.7	6.0
		1920	727	1268	93.1	89.4	80.7	87.0	93.8	94.8	94.6	-1.7	17.0
		1926	DC-9	1727	98.0	92.7	81.9	89.4	96.4	98.2	98.0	- .2	21.0
		1928	727	1744	94.7	90.3	80.2	87.9	94.3	96.0	95.7	-1.3	19.5
		1929			99.9	94.4	86.3	93.9	99.3	101.9	100.1	-2.0	13.5
		1931	727	1547	96.3	91.7	82.4	90.0	96.8	98.7	98.4	-2.4	13.0
		1933	727	1311	100.0	95.5	86.1	92.8	99.9	101.2	101.0	-1.2	18.0
		1935	DC-8	1720	102.0	95.2	86.8	95.6	100.9	104.1	101.9	-2.1	14.0
		1937	DC-8	1544	105.6	98.1	89.7	98.3	104.1	107.8	105.0	-2.2	17.0
		1939			92.7	88.4	78.1	85.5	91.8	93.0	92.9	- .3	16.5
		1944			95.1	90.9	83.3	90.6	96.3	98.6	97.7	-3.5	12.5
		1947			84.0	82.4	75.2	77.8	83.8	86.6	85.5	-2.6	16.0
		2141			91.2	87.8	78.3	85.0	91.5	92.0	92.0	- .8	16.5
		2143			94.8	90.8	81.8	89.6	95.5	96.3	96.4	-1.5	20.0
		2148			89.8	85.9	75.3	81.8	88.3	90.1	90.5	- .3	21.0
		2150			97.7	92.0	82.8	90.3	95.1	89.8	97.3	-1.1	20.0
		2152			92.0	88.2	79.2	86.6	93.3	94.5	94.1	-2.5	16.5
		2154			85.1	83.6	74.1	80.0	85.4	86.1	86.6	-1.0	16.0
A	6-7	2208			101.7	95.6	88.6	96.7	100.7	103.9	101.9	-2.2	12.5
		2248			90.5	87.3	76.7	83.7	90.2	91.0	91.6	- .5	16.0
		2302			95.6	91.1	81.1	87.5	93.7	96.6	96.1	-1.0	17.5
		2309			98.4	92.2	83.6	91.6	97.3	100.2	98.1	-1.8	14.5
		2332			97.5	91.9	84.4	91.9	97.1	100.7	98.4	-3.2	12.5

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	Δ sec
A	6-8	0851			86.4	82.9	75.6	82.4	89.0	90.0	89.4	-3.6	10.0
		0905			82.3	81.4	73.4	77.9	83.2	84.7	84.[illegible]	-2.4	12.0
		0907			83.7	83.2	74.5	79.4	85.2	85.9	86.2	-2.2	13.5
		0913			80.5	80.9	74.9	78.9	84.2	84.2	85.2	-3.7	12.5
		0922			83.5	82.8	74.9	79.0	83.7	85.9	86.1	-2.4	10.0
		0925			86.6	84.5	76.5	82.2	88.6	88.6	88.8	-2.0	14.5
		0930			82.2	81.8	72.9	78.0	83.5	84.5	85.4	-2.3	12.5
		0934			84.3	82.8	73.8	78.4	84.5	84.9	85.3	-.6	17.0
		0943			84.1	83.3	73.9	78.6	83.9	84.9	85.5	-.8	16.0
		1000			84.1	83.3	76.2	79.1	84.1	86.4	85.3	-2.3	10.0
		1010			85.9	83.2	74.1	79.9	85.6	87.0	86.9	-1.1	16.0
		1024			89.8	88.0	78.6	85.1	91.1	91.9	91.8	-2.1	15.0
		1025			85.8	84.0	75.4	81.1	86.9	86.9	88.1	-1.1	18.5
		1026			90.6	87.5	79.8	86.3	93.0	93.5	93.4	-2.9	13.0
		1030			87.0	85.0	75.1	80.2	86.2	87.9	87.8	-.9	20.[illegible]
		1037			90.3	87.2	78.5	84.9	91.3	91.4	91.8	-1.1	15.5
		1045			81.1	80.1	71.1	76.3	82.0	82.4	83.3	-1.3	17.0
		1044			103.4	97.4	93.5	101.9	105.7	109.9	106.2	-4.[illegible]	6.0
		1046			91.2	88.0	80.3	85.4	92.0	94.1	93.7	-2.[illegible]	12.0
A	6-10	1911	DC-9	2651	82.3	82.6	72.1	76.2	81.6	82.2	82.7	[illegible]	24.5
		1914	727	1771	88.1	85.9	75.9	81.3	87.8	89.1	88.8	-1.[illegible]	17.5
		1915	707	2445	95.8	91.7	82.2	88.8	95.1	97.6	95.9	-2.[illegible]	13.5
		1916	727	1917	87.6	86.8	76.4	81.2	87.2	87.8	88.3	-.[illegible]	19.5
		1918	DC-8	2153	90.9	86.9	78.1	84.0	89.9	92.6	90.9	-1.[illegible]	15.0
		1919	727	1798	85.1	84.4	74.5	79.4	85.1	85.7	85.8	-.6	18.5
		1924	DC-8	1598	95.6	90.5	82.6	90.1	96.4	99.2	97.0	-3.6	11.5
		1932	DC-9	2171	93.5	91.1	82.0	87.1	93.6	95.6	95.1	-2.1	16.0
		1933	727	1478	91.8	90.0	81.1	85.7	91.0	92.0	93.4	-.2	19.5
		1946	727	1871	88.6	86.7	77.3	82.7	89.1	90.3	90.4	-1.7	16.0
		1947	727	2667	79.9	81.0	71.0	74.7	80.0	81.0	81.5	-1.1	18.[illegible]
		1952	727	1681	88.8	87.2	77.2	82.4	88.7	89.6	89.8	-.8	19.[illegible]
		1956	DC-9	2151	85.3	84.8	76.2	80.4	85.9	87.7	86.9	-2.4	15.[illegible]
		2000			88.3	87.1	78.3	83.3	89.1	90.0	89.9	-1.7	16.[illegible]
		2011			92.6	90.0	81.1	86.9	93.2	93.9	94.0	-1.3	16.0
		2030			98.7	93.8	84.4	91.0	97.5	100.6	98.[illegible]	-1.9	14.5
		2035			81.7	82.2	71.9	76.1	81.1	81.7	82.4	0	21.0
		2049			87.2	86.0	76.1	81.2	87.1	87.7	87.9	-.6	21.0
		2102			103.1	96.6	89.6	97.8	103.3	107.0	104.2	-3.9	10.5
		2113			97.8	93.5	84.6	92.4	98.2	102.3	99.1	-4.5	8.0
		2119			97.4	91.1	82.9	90.8	96.8	100.9	97.9	-3.6	10.[illegible]
A	6-11	1402	DC-9	2092	91.1	87.0	79.4	86.5	93.0	94.5	93.4	-3.4	14.5
		1403	DC-9	2133	86.0	83.3	74.6	81.5	87.3	87.9	87.9	-1.9	17.0
		1411	727	2000	87.5	85.3	76.2	82.3	88.5	89.2	89.6	-1.7	16.5
		1435	DC-8	1899	95.3	90.3	80.6	88.4	94.2	96.4	95.4	-2.1	16.5
		1440	727	2667	85.7	83.4	74.7	80.2	86.3	87.8	87.4	-2.1	16.5
		1450	VC-10	4070	83.4	84.4	73.7	77.5	82.4	84.2	84.5	-.8	17.0
		1522	720	2462	96.8	94.6	87.3	91.6	97.1	97.8	97.7	-1.0	21.[illegible]
		1531	720	2510	94.2	89.0	80.4	87.3	92.7	95.1	93.6	-.9	18.[illegible]
		1632	DC-9	2171	92.2	87.8	78.3	85.7	92.0	94.3	93.4	-2.1	14.5
		1644	707	2064	96.7	91.8	83.6	91.5	96.5	99.4	97.4	-2.7	14.[illegible]
		1653	727	2829	83.9	82.2	72.0	77.7	83.6	85.1	84.3	-1.2	18.5
		1654	DC-8	2691	95.2	89.3	80.9	89.2	94.7	98.0	95.8	-2.5	19.[illegible]
		1722	DC-8	1830	95.8	91.4	80.5	88.0	93.5	95.5	95.7	.3	23.[illegible]
		1736	727	2417	86.3	83.4	73.3	79.9	86.3	87.7	87.1	-1.4	16.5
		1739	DC-9	2780	85.2	82.5	71.0	77.2	83.1	84.3	84.2	.9	28.[illegible]
		1802	727	2522	87.2	84.2	75.4	81.8	88.0	89.4	89.1	-2.7	15.[illegible]

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
A	6-11	1922			87.9	84.8	76.2	82.6	89.0	90.6	89.6	-2.7	15.0
		1927			96.0	91.0	83.7	91.1	97.4	79.9	97.8	-1.9	13.0
		1929			99.5	94.3	84.1	91.3	98.3	100.0	100.0	- .5	18.5
		1942			97.0	91.7	82.9	90.4	97.3	99.5	99.0	-2.5	15.0
		1945			97.1	92.0	83.4	91.0	97.6	98.7	98.8	-1.6	15.5
		1953			95.9	90.9	82.6	90.7	96.5	98.0	97.1	-2.1	14.5
		1954			90.2	87.3	79.0	85.4	92.1	92.8	93.1	-2.6	12.5
		2012			92.6	88.6	81.3	88.7	95.1	95.7	95.6	-3.1	12.5
		2014			103.8	96.9	91.0	99.6	105.1	108.4	105.4	-4.6	12.5
		2017			91.1	87.3	78.6	84.9	91.8	92.3	92.6	-1.2	17.0
		2019			99.4	93.0	85.6	93.5	98.2	100.7	98.9	-1.3	15.5
		2034			79.9	80.4	71.4	75.7	80.5	81.2	82.1	-1.3	14.0
		2036			92.7	88.4	79.0	86.0	92.5	92.6	93.1	.1	21.0

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBD	D-level dBD	[illegible]	PNLTM PNdB	PNLC PNdB	D dB	d sec
B	5-18	0645	DC-9	2651	87.8	81.9	71.4	76.1	81.8	82.6	83.0	.2	21.5
B	5-18	0782	720	3625	84.3	81.9	71.4	77.0	83.1	84.7	84.6	.4	24.5
		0749	720	2416	98.6	92.5	84.1	92.5	96.4	100.9	97.7	-2.3	15.5
		0800	720	2663	86.0	81.3	70.4	76.8	82.6	85.2	84.7	.8	26.5
		0804	727	2521	89.5	86.2	75.6	81.7	88.4	90.7	89.6	-1.2	20.5
		0810	DC-8	3893	81.0	78.7	69.6	73.7	79.5	81.9	81.6	- .9	16.5
		0821			91.0	88.3	76.8	82.6	89.2	93.6	91.4	-2.6	13.5
		0824			79.1	78.5	69.3	73.8	79.1	79.7	80.4	- .6	21.5
		0835			86.8	84.6	75.9	81.3	87.4	88.0	88.7	-1.2	18.5
		0851	727	3052	80.5	80.4	70.8	74.6	79.6	80.3	82.0	.2	21.5
		0855	727	3135	83.1	81.8	72.4	77.2	83.0	83.7	84.1	- .6	19.5
		0932	727	2274	88.6	84.8	76.5	83.2	89.4	90.4	90.0	-1.8	15.5
		1010	580	2821	82.8	81.2	71.7	76.0	82.2	84.5	84.1	-1.7	14.0
		1015	727	3411	76.2	76.1	66.1	70.2	75.6	76.4	77.2	- .2	18.5
		1341			86.1	83.4	73.8	79.5	85.5	86.6	86.5	- .5	19.0
		1408	727	2761	82.5	81.3	71.8	76.5	82.5	83.1	83.6	- .6	22.5
		1412	BAC-111	4777	77.7	76.9	66.0	70.6	76.4	76.4	78.6	1.3	36.5
		1421	DC-8	3852	77.3	77.9	68.7	72.5	77.0	77.8	78.7	- .5	18.0
		1426	VC-10	4587	83.2	83.3	73.6	77.1	82.7	84.5	83.7	-1.3	20.0
		1441	BAC-111	3583	76.6	77.2	69.5	73.5	78.3	79.0	80.0	-2.4	18.0
		1512	707	1914	96.6	96.1	81.7	91.9	97.5	98.4	98.5	-1.8	18.0
		1515	720	3182	91.8	85.4	76.0	84.3	89.6	94.1	90.9	-2.3	15.5
		1526	747		90.7	86.6	75.9	81.5	88.4	91.3	89.7	- .6	22.5
		1529	DC-8	2751	92.2	86.2	75.4	82.9	90.3	93.3	91.2	-1.1	20.5
		1532	707	2745	92.1	86.1	75.3	82.8	90.2	93.2	91.1	-1.1	20.5
		1535	727	2128	89.6	87.3	76.8	81.4	87.4	90.0	89.0	-1.3	23.0
		1537	720	2776	90.5	84.5	76.5	84.3	89.0	93.2	90.7	-2.7	16.0
		1538	727	2468	89.3	85.5	76.3	81.6	87.9	88.7	89.2	- .4	21.5
		1609	DC-8	3734	78.9	79.0	68.3	72.0	77.2	77.9	79.1	.6	26.5
		1639	727	2417	84.1	82.9	71.4	76.2	82.2	82.4	83.4	1.6	29.0
		1653	BAC-111	2774	82.2	82.4	72.0	75.8	81.3	82.3	83.6	- .1	20.5
		1655	BAC-111	3308	73.5	74.2	63.2	67.2	72.8	74.4	76.8	- .9	24.5
		1700	720	2610	85.6	83.2	72.3	76.8	83.3	84.9	85.4	- .17	30.5
		1710	727	2607	80.0	79.4	69.2	74.1	79.7	81.5	81.2	-1.5	16.0
		1714	737	2155	83.5	82.0	71.8	76.8	82.7	84.4	84.2	- .9	22.5
		1727	720	2663	83.2	87.5	78.6	86.6	92.0	96.7	93.2	-3.5	10.0
		1737	BAC-111	4774	75.0	75.0	67.8	71.8	77.6	78.7	79.2	- .3	31.0
		1803	727	3579	80.9	80.3	69.6	74.3	79.7	80.2	81.2	.7	25.0
		1822			69.5	70.5	62.4	66.7	71.2	70.8	74.8	-7.3	5.0
B	5-18	1907	707	2645	94.4	88.3	78.8	87.7	91.6	95.2	92.9	-1.0	17.0
		1913	727	3208	80.6	77.2	70.1	74.9	81.3	82.0	81.9	-1.4	20.5
		1916	707	3063	88.2	81.0	68.6	73.9	80.8	81.9	82.4	1.3	27.5
		1917	727	3268	82.5	79.8	71.4	76.6	83.1	84.6	84.0	-2.1	17.0
		1920	727	2636	90.6	84.3	73.2	79.0	85.6	87.1	87.6	-1.1	18.0
		1936			93.1	84.1	79.8	88.3	92.6	97.4	94.0	-4.3	9.0
		1938			93.8	87.1	79.2	87.5	92.8	97.2	93.5	-3.4	12.5
		2005			89.5	83.0	72.6	80.5	86.0	90.4	87.0	- .9	23.5
		2030			87.0	83.4	70.2	76.6	83.1	85.8	84.7	1.2	37.0
		2039			82.0	80.6	68.9	73.4	79.1	79.9	81.7	3.1	32.5
		2041			85.9	82.8	72.1	78.1	84.8	86.3	86.0	- .4	21.5
		2118			83.0	77.9	67.9	75.2	81.2	85.5	82.3	-2.5	16.0
		2119			83.0	77.9	69.6	77.4	84.2	84.8	85.3	-1.8	18.0
		2138			76.0	75.1	66.0	70.7	76.2	77.2	76.2	- .6	26.5
		2140			81.7	79.4	67.5	73.2	79.3	80.3	80.4	1.4	30.0
		2141			88.6	83.5	73.0	79.1	86.1	87.5	88.1	1.1	22.0
		2144			92.6	86.3	76.4	84.6	89.5	93.7	91.0	-1.1	17.5
B	5-18	2310			80.5	78.2	65.4	70.3	76.6	77.9	79.1	.6	45.5

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
B	5-19	0748	727	3625	79.3	78.7	68.8	73.4	78.6	79.3	80.2	0	24.5
		0750	727	3742	83.2	81.5	71.1	76.2	81.9	82.4	83.3	.8	23.0
		0846	DC-8	2889	94.7	88.9	79.1	86.9	92.9	96.4	93.9	-1.7	16.5
		0849	727	2698	89.4	85.5	75.8	82.3	88.5	89.8	89.6	- .4	19.5
		0907	BAC-111	2820	81.6	80.5	72.3	76.4	82.1	83.3	83.4	-1.7	21.5
		0915	DC-8	2785	96.8	91.0	85.4	93.6	97.7	101.3	98.2	-4.5	10.0
		0918	DC-8	3046	97.6	90.7	83.5	91.9	96.3	100.9	97.2	-3.3	11.5
		0928	727	2495	89.3	85.6	76.5	83.5	90.2	91.8	91.0	-2.5	14.5
		0958	DC-9	2747	87.6	84.0	73.9	80.9	87.0	88.6	88.1	-1.0	18.5
		1011	727	1966	89.8	86.3	77.0	83.5	90.2	91.5	91.0	-1.7	15.0
		1049	720	2558	91.2	85.7	76.9	84.0	89.6	93.4	90.9	-2.2	18.0
		1102	720	2776	96.4	90.3	83.3	91.6	95.5	100.2	96.4	-3.8	13.5
		1128	707	2509	101.0	94.1	86.6	95.0	100.3	103.9	100.6	-2.9	16.0
		1402	707	2645	94.8	89.0	81.3	89.3	94.6	98.2	95.9	-3.4	11.5
		1403	BAC-111	2606	79.3	78.0	67.9	73.3	79.4	79.4	81.4	- .1	22.0
		1411	727	2578	86.4	84.3	73.4	78.5	85.4	85.4	86.4	1.0	23.0
		1450	VC-10	3905	94.8	94.1	85.9	90.4	96.4	96.9	96.6	-2.1	16.5
		1501	727	2667	85.4	82.4	73.4	79.3	85.4	86.2	86.9	- .8	20.5
		1505	727	2297	86.3	83.9	75.5	81.1	87.6	88.5	88.3	-2.2	16.5
		1539	727	2468	85.6	83.6	73.1	78.5	84.8	85.5	86.2	.1	20.5
		1541	720	1800	95.9	90.1	83.7	91.8	95.9	99.1	96.5	-3.2	12.5
		1544	DC-8	2611	94.3	87.2	76.4	84.1	91.1	94.4	91.8	- .1	28.0
B	5-20	0750	720	2510	88.5	84.4	76.4	83.2	88.2	92.6	89.6	-4.1	9.5
		0753	720	2663	90.7	86.7	81.6	89.3	92.9	96.0	93.2	-5.3	9.0
		0755	707	2910	92.1	87.0	79.8	87.3	91.7	94.7	92.5	-2.6	14.5
		0758	727	2667	93.5	91.3	79.3	84.2	90.5	91.2	93.1	2.3	37.5
		0802	727	2367	83.3	83.2	73.3	78.3	83.9	85.0	86.0	-1.7	19.0
		0831	DC-8	2731	87.8	85.1	74.5	79.5	85.9	89.1	87.7	-1.3	22.5
		0834	727	2667	85.7	84.6	74.2	79.1	85.4	87.2	86.5	-1.5	17.5
		0836	BAC-111	2205	87.2	85.7	76.1	80.7	86.5	87.6	88.2	- .4	20.0
		0853	727	2053	89.2	86.8	75.9	81.7	88.2	89.3	90.2	- .1	25.5
		0859	727	2252	89.5	87.5	77.7	82.3	88.6	89.2	90.2	.3	32.0
		1202	DC-9	2379	77.9	78.0	68.6	72.1	77.9	79.4	79.5	-1.5	17.0
		1434	707	2719	99.8	93.8	84.6	92.5	98.4	101.2	99.2	-1.4	17.0
		1441	VC-10	3010	90.0	89.2	80.4	84.0	90.1	90.1	90.8	- .1	21.0
		1447	727	2607	77.4	77.4	68.0	71.6	76.8	78.1	78.7	- .7	19.5
		1454	Gulf II	4102	78.5	78.2	71.0	74.6	80.2	80.2	81.4	-1.7	12.0
		1457	DC-8	2924	91.2	91.7	81.2	85.2	90.6	91.3	91.8	- .1	23.5
		1514	727	3231	87.0	85.1	73.5	78.4	84.5	86.0	86.0	1.0	28.0
		1519	727	2320	83.6	82.5	72.2	77.1	83.3	84.1	85.0	- .5	26.0
B	5-23	1100	720	2610	81.4	80.9	71.6	75.8	81.1	82.0	82.3	- .6	19.0
		1116	720	2837	86.1	81.3	74.7	81.1	86.5	90.8	87.7	-4.7	11.5
		1130	707	3384	82.2	81.3	71.4	76.2	820	85.4	82.9	-3.2	14.5
		1144	DC-9	3677	79.6	79.9	70.1	73.7	78.6	79.6	80.5	0	23.0
		1150	727	3803	72.5	73.6	63.3	67.2	72.1	73.1	73.4	- .6	19.0
		1530	DC-8	3440	83.6	81.9	72.7	76.9	82.6	83.2	84.6	.4	26.0
		1555	DC-8	2577	90.4	86.2	76.4	83.1	89.6	92.6	90.5	-2.2	14.0
		1559	727	2900	79.7	79.6	69.8	73.8	79.7	80.6	80.8	- .3	22.0
		1626	BAC-111	2774	85.1	85.3	76.7	80.3	85.7	86.9	87.4	-1.8	20.0
		1820	727	2667	82.7	82.1	71.6	75.9	81.8	83.6	83.3	- .9	18.0
B	5-23	1901	707	3233	84.8	83.0	73.1	78.1	84.4	88.3	86.2	-3.5	14.5
		1916	727	2000	88.5	86.9	78.0	82.8	88.8	89.7	89.7	-1.2	17.5
		1918	727	2000	86.1	84.6	74.4	79.1	85.4	86.3	86.8	-0.1	22.0
		2015			83.1	85.0	75.7	78.8	83.4	84.3	84.0	-1.2	19.5
		2033			81.5	81.7	72.8	76.5	82.2	82.9	83.1	-1.4	19.5
		2126			77.4	79.0	68.1	71.8	77.2	78.8	80.1	-1.4	18.0
		2147			93.5	87.8	78.8	86.3	92.3	97.1	93.1	-3.6	9.5
B	5-23	2215			84.2	83.9	75.5	79.5	85.3	85.8	85.9	-1.6	17.5
		2302			88.5	83.5	75.1	82.7	87.8	92.3	88.9	-3.8	12.0

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	Δ sec
B	5-24	1439	727	1983	90.5	86.2	76.5	83.2	89.9	91.8	90.7	- .5	19.5
		1444	727	2274	90.7	86.6	78.0	85.2	91.5	92.3	92.4	-1.6	18.0
		1453	727	2168	86.7	83.9	74.7	80.3	86.7	87.5	87.6	- .8	19.0
		1501	VC-10	2627	97.0	94.9	85.1	89.5	95.7	96.7	97.5	.3	27.0
		1513	747	2610	94.4	90.5	79.5	85.2	91.7	93.9	93.0	1.1	29.0
		1516	720	2610	97.0	89.8	81.8	90.3	94.8	99.9	96.3	-2.9	14.0
		1518	DC-8	1911	104.6	97.1	86.5	94.6	100.9	104.1	102.1	.5	20.8
		1640	BAC-111	2020	84.7	82.4	71.5	76.6	82.8	83.6	84.8	1.1	30.0
		1645	707	2385	101.7	94.7	87.5	96.2	101.2	105.4	101.6	-3.7	11.5
		1647	DC-9	2651	86.8	83.9	73.7	81.0	86.8	87.3	88.2	- .5	22.0
		1702	BAC-111	2389	88.8	86.7	78.0	82.4	88.4	89.4	89.4	- .6	25.0
		1703	727	2495	87.3	84.3	75.6	81.4	88.0	88.9	88.6	-1.6	19.0
		1705			99.8	92.5	84.5	93.1	98.1	102.9	98.8	-3.1	10.00
		1708			85.5	82.1	71.5	78.0	85.0	86.3	85.8	- .8	18.5
		1720	727	2864	84.1	81.7	70.9	76.0	83.7	84.7	85.2	- .6	21.5
		1723	707	2771	97.3	90.0	83.4	92.0	96.7	101.4	97.6	-4.1	10.0
		1730	BAC-111	3440	78.2	78.5	72.9	77.8	81.8	84.1	85.2	-5.9	8.0
		1821	727	2442	88.9	85.2	76.4	82.6	89.5	90.7	90.3	-1.8	17.0
B	5-25	0900	HS-125	2917	87.7	87.1	77.8	81.5	87.8	88.3	88.8	- .6	23.5
		0903	580	2194	85.0	83.2	72.7	75.8	82.0	85.1	84.4	- .1	20.5
		0907	737	2262	75.4	76.2	67.2	73.1	79.0	79.0	81.4	-3.6	12.0
		0911	720	2039	98.8	93.1	84.7	93.0	97.2	101.0	99.0	-2.2	16.5
		0914	BAC-111	2867	86.2	84.8	74.0	79.3	85.7	85.7	87.0	.5	22.5
		0919	BAC-111	4410	79.5	79.6	68.9	72.4	77.6	78.3	80.9	1.2	29.5
		1047	720	2610	83.0	79.4	79.9	75.4	81.5	83.7	84.3	- .7	26.0
		1054	737	2623	76.2	76.5	[illegible].2	73.3	78.8	79.1	79.6	-2.9	9.5
		1102	DC-9	2133	87.8	84.3	75.3	83.2	88.4	90.1	90.1	-2.3	16.0
		1103	720	2486	98.2	92.2	83.3	91.6	96.7	100.9	97.9	-2.7	12.5
		1105	727	2231	92.3	89.1	79.4	85.5	91.6	93.0	92.9	- .7	20.0
		1113	DC-9	1614	87.3	84.8	74.9	81.1	87.0	88.0	88.4	- .7	23.5
		1714	BAC-111	2774	81.6	81.5	74.3	78.2	83.5	83.5	85.3	-1.9	16.0
		1716	727	2698	89.4	86.8	77.3	82.7	89.1	91.0	89.9	-1.6	21.0
		1758	720	2719	97.2	91.2	81.9	89.8	95.1	98.9	96.1	-1.7	13.0
		1800	727	1487	95.1	91.0	82.1	88.7	95.6	97.2	96.3	-2.1	15.50
		1822	737	2262	83.1	81.7	73 4	78.5	84.1	84.9	85.2	-1.8	12.5
B	5-25	1903	DC-8	3588	95.6	89.5	80.7	88.4	94.5	98.3	95.7	-2.7	12.5
		1907	720	3144	96.2	89.6	82.8	91.2	96.2	100.8	96.9	-4.6	8.5
		1910	727	3178	81.1	80.9	71.0	75.0	80.1	80.6	81.7	.5	24.5
		1912	DC-9	3028	88.6	87.2	76.3	80.8	87.0	88.1	88.5	.5	36.0
		1916	727	1870	96.8	93.7	83.7	88.7	95.0	96.7	96.4	1	25.5
		1922			96.7	90.7	81.3	88.9	95.1	98.0	96.1	-1.3	17.5
		1923			83.7	82.6	73.1	77.3	82.8	83.3	84.3	.4	27.0
		1925			96.9	90.1	82.1	90.3	95.3	99.9	96.2	-3.0	12.0
		1927			82.3	81.7	71.8	75.9	81.7	82.8	83.0	- .5	22.0
		1930			87.4	85.2	75.6	81.4	87.4	88.6	89.2	-1.2	16.0
		2143			80.9	79.7	72.6	77.1	83.1	83.1	83.9	-2.2	12.5
		2149			77.7	78.7	68.5	71.9	76.6	77.9	78.0	- .2	21.0

Pos	Date	Time	A/C	Distance Ft.	[illegible]	[illegible]	A-level	D-level	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C	5-18	0645	DC-9	3164	79.0	78.4	67.8	73.6	78.6	79.7	79.7	-0.7	24.5
C	5-18	0742	720	3175	79.0	77.7	67.0	71.8	77.7	80.2	78.0	-1.3	16.0
		0749	720	3642	80.2	80.6	73.6	81.0	78.2	90.2	80.1	-1.3	16.5
		0800	720	2966	76.5	75.9	66.6	70.5	76.9	78.6	78.4	-0.3	20.0
		0804	727	3052	80.7	80.3	70.0	76.0	81.7	83.1	83.0	-0.4	27.0
		0809	DC-8	4323	77.7	77.8	67.2	71.9	77.0	77.7	78.0	0.0	28.5
		0821	DC-8	3881	85.5	84.8	74.8	79.0	84.5	85.0	85.3	0.5	30.0
		0825	707	6148	71.7	71.2	63.8	69.4	74.2	73.0	73.8	-3.3	15.5
		0834	727	4519	78.5	77.3	69.6	75.2	80.0	80.9	81.5	-2.4	20.0
		0851	727	3643	76.9	76.7	68.7	73.3	78.4	78.7	79.2	-1.8	18.0
		0907	B-90		72.4	71.0	60.8	67.4	72.7	74.1	73.1	-1.7	18.0
		0909	720	2559	86.0	81.7	71.6	77.7	83.5	86.3	85.8	-0.3	23.5
		0932	727	2852	82.3	80.5	70.1	75.1	81.0	82.2	82.0	0.7	24.5
		1010	580	2963	76.7	78.3	68.7	72.7	77.7	80.6	80.1	-1.7	26.0
		1014	727	4484	72.0	73.0	63.6	68.9	73.3	73.9	76.3	-1.9	26.5
		1052	737	2919	76.7	76.3	65.6	70.2	73.9	76.7	78.0	0.0	22.0
		1103	720	3809	87.6	83.1	74.1	81.6	88.1	91.9	89.7	-1.3	12.5
		1114	720	2494	94.4	87.8	81.2	89.5	88.7	88.7	93.1	-1.3	2.0
		1117	DC-8	2794	52.8	81.4	71.5	76.0	81.9	84.9	83.4	-1.1	18.0
		1133	580	2418	83.3	79.7	71.3	78.6	83.9	86.7	88.2	-1.4	22.0
		1153	727	2636	83.1	82.3	71.1	75.0	81.6	82.4	83.1	0.7	24.5
		1210	Jet Comm	3188	78.7	78.1	70.3	75.0	81.0	82.4	83.2	-3.7	13.5
		1250	727	3164	82.2	81.0	70.5	75.4	83.4	82.4	83.5	-0.2	24.5
		1338	DC-9	2531	72.8	68.2	68.2	73.2	78.8	79.3	81.5	-0.5	6.5
		1406	727	2852	81.1	79.5	70.0	75.1	80.9	81.4	82.9	-0.3	20.0
		1410	BAC-111	4607	73.2	74.1	63.2	69.9	74.7	73.2	77.2	-2.0	13.0
		1452	VC-10	6992	74.9	76.8	66.0	70.7	75.3	76.1	78.4	-1.2	13.5
		1488	NB-2B	1561	80.5	77.7	70.7	76.7	82.7	84.5	84.4	-4.0	9.5
		1511	DC-8	2226	90.0	89.4	77.5	[illegible]	87.8	87.9	89.3	2.1	34.0
		1514	720	3858	87.8	82.5	75.3	[illegible]	87.5	92.1	89.2	-4.3	12.0
		1531	DC-8	3004	89.2	87.0	77.0	81.2	86.9	88.6	87.9	0.6	26.0
		1534	727	2684	89.8	87.8	76.5	81.8	87.7	88.3	90.1	1.5	26.0
		1535	720	3107	88.8	83.3	73.6	80.8	86.6	89.9	87.4	-1.1	19.5
		1537	727	2900	83.8	81.7	72.4	77.6	83.5	85.6	85.0	-1.8	17.0
		1608	DC-8	4097	76.6	76.2	65.9	69.9	75.1	76.0	76.5	0.6	20.5
		1612	707	3118	88.5	83.2	75.3	82.4	87.6	90.7	88.2	-1.8	15.5
		1628	BAC-111	3308	77.7	77.9	68.6	72.5	76.1	77.4	[illegible]	0.3	24.5
		1636	727	3045	82.9	81.5	71.4	75.9	81.3	81.7	[illegible]	[illegible]	29.5
		1645	Gulf I	2917	78.7	78.0	68.1	72.3	77.9	78.6	79.5	0.1	30.0
		1651	BAC-111	3000	83.0	82.6	72.1	76.3	80.0	82.9	83.6	0.1	31.0
		1658	BAC-111	3583	75.8	75.2	64.9	69.5	74.0	75.6	77.7	0.2	24.5
		1659	720	2757	83.9	83.2	73.9	77.0	82.0	82.6	85.4	1.3	29.0
		1709	727	2761	77.1	76.2	[illegible]	72.2	78.0	80.4	78.4	-3.3	28.0
		1712	727	3107	81.9	80.9	70.3	74.2	79.8	81.2	81.9	0.7	28.0
		173?	580	4232	69.7	70.8	61.9	65.3	68.9	71.1	72.3	-1.4	23.5
		1800	727	3445	79.6	78.5	68.1	72.7	78.4	79.3	80.7	0.3	25.0
C	5-18	1906	707	2949	93.1	87.0	77.6	85.6	90.1	94.3	91.4	-1.8	18.5
		1915	DC-8	3624	81.9	79.5	67.9	73.3	80.0	81.4	83.6	0.5	29.5
		1917	727	3587	02.5	79.7	70.6	75.7	81.7	83.7	83.8	-1.8	19.0
		1919	727	3163	85.6	82.8	71.9	77.3	84.0	85.3	85.2	0.3	28.5
		1921	DC-8	2772	86.9	82.4	71.4	77.6	84.2	87.4	85.4	-0.5	22.5
		1936	720	2575	92.7	86.8	77.8	86.0	91.3	95.7	92.7	-3.0	12.5
		1938	707	4004	88.2	82.8	74.2	81.2	87.3	90.3	87.6	-2.1	13.0
		2004			92.2	86.4	78.0	85.2	90.4	94.1	91.9	-1.9	15.0
		2005			76.8	70.9	64.5	71.6	78.4	81.1	79.6	-4.3	8.5
		2028			86.8	82.9	71.4	77.6	83.8	86.7	86.8	0.1	27.5
		2037			83.0	81.1	69.6	74.4	80.5	83.0	82.8	1.0	27.5
		2039			84.7	82.2	71.7	77.3	83.7	84.8	85.7	-0.1	25.5
		2117			78.1	73.8	64.2	70.9	76.3	80.6	78.3	-2.5	14.5
		2136			67.1	70.2	60.7	65.8	70.9	70.9	72.8	-3.8	8.0
		2137			79.9	77.9	67.0	72.5	77.2	78.5	80.2	1.4	28.5
		2138			82.5	80.1	70.8	75.9	81.8	83.1	82.8	-0.6	24.5
		2156			76.6	75.8	65.1	69.1	75.2	76.3	76.3	0.3	25.0
		2308			78.0	77.3	65.4	69.4	75.2	76.2	77.8	1.8	27.0

TABLE V (con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d - sec
C	5-19	0958	DC-9	3109	86.0	82.8	74.0	80.4	86.7	87.8	87.1	-1.8	18.5
		1010	727	2485	86.5	83.3	74.8	80.8	87.0	88.6	87.8	-2.1	15.5
		1048	720	2836	89.8	84.6	76.5	83.6	88.8	92.5	89.7	-2.7	11.5
		1053	737	3016	87.4	85.5	75.7	81.6	87.6	89.2	88.6	-1.8	18.0
		1102	720	3058	95.7	89.1	82.1	90.5	94.7	99.7	95.8	-4.0	11.5
		1109	727	2676	83.4	81.4	71.2	76.7	82.9	84.2	84.1	-0.8	19.0
		1127	707	2645	100.3	93.1	84.4	92.9	97.9	102.5	99.2	-2.2	15.5
		1217	DC-9	2209	87.2	83.8	75.2	81.1	87.6	88.4	88.5	-1.2	14.5
		1218	727	4046	72.9	72.1	65.2	70.8	76.4	76.4	78.2	-3.5	11.0
		1220	DC-9	2840	82.8	81.8	71.3	76.0	81.7	82.5	83.0	0.3	24.0
		1222	DC-9	2676	82.1	80.3	70.7	75.9	81.8	83.6	83.4	-1.5	17.0
		1228	Gulf II	1649	72.2	73.6	67.2	71.0	75.7	76.2	76.3	-4.0	10.5
		1239	Lear		71.9	73.5	67.4	71.1	75.7	76.2	76.7	-4.3	20.5
		1248	727	3411	80.4	80.2	70.2	74.7	80.5	81.8	82.8	-1.4	16.5
		1308	580	2604	76.3	75.1	64.9	69.8	75.8	77.7	78.4	-1.4	16.5
		1344	DC-9	3257	87.6	84.6	76.0	81.6	87.8	89.8	89.2	-2.2	14.5
		1402	707	2780	94.2	88.7	81.9	89.8	94.1	98.2	95.8	-4.0	9.5
		1404	BAC-111	3158	76.5	76.3	67.1	71.7	77.5	77.5	79.1	-1.0	18.5
		1446	Jet-Star		84.8	84.5	75.5	79.9	85.4	86.0	86.0	-1.2	19.0
		1450	VC-10	2590	93.7	92.5	82.7	87.3	93.4	94.0	95.3	-0.3	22.5
		1505	727	2521	84.3	82.7	73.0	78.8	84.7	85.2	85.5	-0.9	17.5
		1538	727	2829	83.0	81.2	73.3	78.2	84.8	85.7	85.4	-2.7	17.5
		1540	720	1864	93.8	88.0	81.5	88.9	94.0	97.5	94.5	-3.7	9.0
		1543	DC-8	3510	92.7	86.6	.0	84.3	90.7	93.2	91.3	-0.5	21.0
C	5-20	0644	DC-9	4071	79.0	78.8	67.5	72.0	77.4	78.4	79.9	0.6	26.0
C	5-20	0750	720	2816	88.9	84.5	75.7	82.7	87.7	92.3	89.0	-3.4	13.5
		0753	720	2878	92.0	87.3	80.7	88.0	92.3	95.4	93.0	-3.4	11.5
		0755	707	3569	90.0	84.7	75.5	82.7	87.5	91.8	89.6	-1.8	14.5
		0757	727	2924	91.5	89.4	79.4	83.9	90.0	91.1	91.7	0.5	26.5
		0801	727	2656	83.4	82.4	70.8	75.6	81.3	82.7	83.1	0.7	28.5
		0831	DC-8	3016	89.2	86.0	76.2	81.0	87.8	90.6	88.9	-1.4	22.5
		0833	727	2877	80.4	81.0	70.3	74.4	79.4	79.9	81.9	0.5	23.0
		0835	BAC-111	2388	83.2	82.3	73.1	77.2	82.1	83.4	84.9	-0.2	21.0
		0853	727	2274	85.0	83.5	74.0	79.1	84.8	85.5	86.7	-0.5	22.5
		0858	727	2833	89.3	87.4	77.5	82.1	87.6	88.7	89.3	0.6	26.5
		0917	BAC-111	2965	81.9	81.5	70.3	74.5	80.2	81.4	82.2	0.5	25.5
		0944	727	2607	83.4	82.9	72.2	76.5	81.9	82.5	83.3	0.9	25.5
		1103	720	2878	88.0	84.2	76.1	83.1	87.9	92.5	89.9	-4.5	9.0
		1126	720	2757	91.3	86.9	78.2	85.7	90.0	93.6	91.2	-2.3	16.0
		1128	707	2711	93.0	87.9	79.4	87.0	90.6	93.7	92.5	-0.7	17.5
		1202	DC-9	3298	77.4	77.3	68.1	72.9	78.3	79.3	80.0	-1.9	14.0
		1254	727	2485	82.9	81.0	69.1	73.5	79.4	79.4	81.0	2.8	31.0
		1343	DC-9	3352	84.2	82.0	71.0	76.8	82.8	84.0	84.2	0.2	27.0
		1414	BAC-111	2971	82.1	81.6	73.4	77.5	83.2	83.8	84.7	-1.7	19.0
		1416	727	3782	80.8	80.0	67.7	72.4	78.2	79.1	80.4	1.7	35.0
		1417	DC-9	3054	85.0	83.1	71.4	76.5	82.3	83.7	84.6	1.3	32.5
		1432	707	2871	98.8	92.8	82.6	90.5	96.7	99.6	97.5	-0.8	19.0
C	5-23	1143	DC-9	4023	80.5	80.2	68.7	73.2	78.4	79.6	80.3	0.9	31.5
		1533	DC-8	3453	81.4	81.5	74.0	78.4	83.8	83.8	84.4	-2.4	18.0
		1546	VC-10	3052	85.6	86.0	75.5	79.3	84.4	84.4	85.8	1.2	27.5
		1601	727	3000	77.2	78.1	67.5	71.4	76.6	77.5	78.9	-0.3	19.5
		1603	737	2951	75.1	75.6	65.5	70.2	75.5	76.4	76.6	-1.3	18.5
		1624	727	3026	80.3	80.3	70.0	74.4	79.6	80.3	80.5	0	22.0
C	5-23	1905	717	3068	82.6	80.6	71.1	76.3	82.2	85.9	83.2	-3.3	13.0
		1907			93.2	88.7	79.4	84.8	91.5	94.5	92.6	-1.3	15.5
		1911			78.0	77.8	66.3	70.5	76.1	76.8	77.2	4.2	
		1918			82.9	82.3	72.8	77.4	83.3	84.2	83.9	-1.3	18.5
		1920			85.9	84.7	76.3	80.5	86.0	86.8	86.9	-0.9	17.0
		1929			83.9	70.8	68.7	75.1	81.4	86.6	83.1	-2.7	11.0
		1950			77.8	77.3	65.0	69.8	75.9	78.6	77.2	-0.8	27.0
		2020			80.9	81.6	73.4	76.7	81.4	82.3	82.5	-1.4	14.0
		2036			81.3	81.6	71.6	75.4	80.0	81.5	81.5	-0.2	21.5
		2130			78.9	79.6	70.1	73.8	79.0	79.6	80.4	-0.7	22.0
		2152			92.1	86.0	76.6	84.5	89.9	95.6	91.3	-3.5	8.5

TABLE V (Con't)

Poe	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
C	5-23	2218			83.6	82.7	72.8	76.8	82.5	83.3	84.0	0.3	21.0
		2306			86.8	82.4	73.6	81.1	85.3	88.0	86.5	-1.7	17.5
C	5-24	1322	DC-9	2973	80.9	78.7	69.0	74.8	81.0	82.7	81.8	-1.8	19.0
		1343	707	2910	99.7	92.5	83.6	92.2	97.3	101.1	98.0	-1.4	17.0
		1345	DC-9	3386	82.3	80.3	74.0.	78.4	84.3	85.3	84.8	-3.0	19.0
		1351	DC-9	2530	85.3	82.6	71.7	78.5	85.1	86.5	85.9	-1.2	26.5
		1408	BAC-111	3440	78.4	77.3	66.6	71.3	77.4	78.2	78.6	0.2	30.5
		1410	707	3257	95.5	88.4	80.2	88.6	94.0	98.3	94.7	-2.8	15.0
		1425	DC-9	2898	78.1	77.1	66.6	71.4	77.4	79.8	79.0	-1.7	23.0
		1427	707	7155	88.1	84.0	72.5	79.8	85.2	86.7	86.0	1.4	33.0
		.439	727	2304	90.6	86.0	76.4	83.3	90.2	92.2	90.7	-1.6	21.0
		1444	727	2636	91.1	86.4	77.8	85.0	91.5	92.7	92.0	-1.6	15.5
		1454	727	2289	86.7	84.2	73.7	79.6	85.9	86.5	86.7	0.2	25.5
		1500	VC-10	2851	97.5	95.5	85.7	90.4	96.4	97.7	98.0	-0.2	26.0
		1514	747	2509	91.3	88.4	81.0	86.4	93.2	94.5	93.3	-3.2	18.5
		1515	720	2878	97.6	89.9	84.8	93.4	97.9	102.9	98.2	-5.3	9.5
		1517	707	2508	103.2	96.1	86.5	94.8	100.8	103.8	101.8	-0.6	19.5
		1520	720	2816	92.9	90.8	80.4	85.7	91.5	92.4	92.3	0.4	25.5
		1522	727	2035	90.2	87.3	77.5	83.1	89.6	90.7	90.3	-0.5	22.0
		1528	Gulf II		82.4	81.2	71.6	77.1	82.9	83.5	84.6	-1.1	18.5
		1534	DC-8	2445	98.4	91.0	82.5	91.1	96.4	99.2	97.0	-0.8	17.0
		1559	737	2715	75.0	74.5	63.0	68.8	74.1	75.0	75.8	0	20.0
C	5-25	0628	727	2974	80.3	79.8	68.7	73.6	79.2	79.8	80.3	0.5	25.0
		0649	DC-9	2484	84.4	82.6	72.5	77.1	83.0	83.8	84.7	0.6	29.0
C	5-25	0708	DC-9	3331	89.8	85.5	76.1	82.5	89.3	90.4	89.8	-0.6	21.0
		0754	720	3132	97.6	91.1	83.7	92.1	96.7	101.3	97.4	-3.7	10.5
		0800	727	3000	83.4	82.4	72.5	76.9	82.9	83.9	84.0	-0.5	22.0
		0802	DC-8	3050	93.7	88.2	77.9	85.0	90.6	93.5	92.1	0.2	23.5
		0805	707	3589	94.5	89.0	80.5	87.8	92.9	96.6	93.8	-2.1	17.5
		0808	707	2852	97.7	91.7	83.9	91.7	96.1	98.6	98.8	-0.9	25.0
		1059	DC-9	2651	79.5	78.3	72.4	76.6	82.3	83.3	83.7	-3.8	9.0
		1101	720	2776	98.0	91.3	83.5	91.9	96.6	101.3	97.6	-3.3	11.0
		1103	727	2540	90.5	87.4	77.3	83.0	89.3	90.5	90.8	0	23.5
		1111	DC-9	2442	87.4	84.9	76.2	82.6	89.0	90.0	89.5	-2.6	16.5
		1113	737	2515	86.6	83.8	72.2	78.8	85.2	86.6	86.7	0	23.0
		1120	720	3235	95.8	89.2	81.8	89.4	93.6	97.7	94.7	-1.9	16.5
		1201	DC-9	4329	64.3	64.8	62.7	68.3	73.4	73.9	76.5	-9.6	3.5
		1220	HS-125		75.9	77.8	67.8	71.3	76.3	77.0	78.4	-1.1	17.0
		1328	707	2728	100.1	93.4	83.8	92.2	97.6	101.4	99.2	-0.9	19.5
		1345	DC-9	3717	80.8	80.2	71.8	76.2	81.5	82.6	83.0	-1.8	16.5
		1801			88.7	83.0	76.3	83.6	89.1	93.3	89.6	-4.6	9.5
C	5-25	1906			84.0	83.3	73.4	78.0	83.7	84.9	86.3	-0.9	21.5
		1910			90.2	88.0	78.1	83.2	89.0	90.0	91.6	0.2	25.0
		1915			91.8	87.4	77.7	84.2	90.1	93.2	91.8	-1.4	20.5
		1924			81.3	80.2	71.5	76.7	82.2	82.7	83.5	-0.4	18.0
		2004			77.2	77.7	66.2	70.4	75.8	76.8	77.9	0.4	30.0
		2149			77.1	77.2	70.5	73.5	79.0	80.4	79.4	-3.3	15.5
		2150			93.7	88.1	79.4	87.6	93.3	96.7	93.4	-3.0	14.5

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	B-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
D	6-2	1648	727	3135	90.7	87.2	78.2	83.9	89.8	91.0	91.7	- .3	23.5
		1650	727	3412	86.2	83.6	72.1	77.5	83.8	85.8	85.5	.4	27.5
		1754	737	4022	77.5	76.0	67.4	72.4	78.2	79.6	79.4	-2.1	14.0
		1808	727	3569	85.8	83.3	72.6	77.9	84.9	86.4	86.3	- .6	20.5
		1844			89.2	89.2	80.9	84.7	89.9	90.6	90.8	-1.4	24.5
D	6-3	1424	DC-9	3931	84.7	81.8	73.3	79.9	85.2	86.5	86.2	-1.8	19.5
		1435	DC-8	4061	91.5	86.1	76.4	82.8	89.1	92.7	91.1	-1.2	19.0
		1456	727	4070	79.4	79.6	70.5	75.1	80.1	83.3	81.3	-3.9	21.5
		1506	707	4099	86.4	83.4	73.9	80.6	86.0	90.0	87.5	-3.6	11.5
		1508	720	4078	82.1	81.1	69.7	74.5	80.2	82.4	82.3	- .3	19.5
		1540	720	3955	93.0	86.5	77.4	85.3	91.0	94.8	91.7	-1.8	18.0
		1551	727	6824	68.5	69.8	65.5	70.5	75.4	76.7	77.9	-8.2	3.0
		1600	737	3620	77.4	77.1	67.5	71.9	76.9	78.4	79.4	-1.0	20.0
		1627	BAC-111	4778	73.6	75.5	66.4	70.3	75.1	76.3	76.6	-2.7	16.0
		1636	727	4640	75.7	75.8	64.2	68.9	73.6	73.8	75.9	1.9	28.5
		1638	727	4549	78.4	78.1	68.4	72.6	78.1	79.4	78.9	-1.0	22.5
		1650	BAC-111	3909	72.2	72.9	64.4	68.2	73.4	73.7	75.0	-1.5	16.5
		1715	727	3625	75.8	74.6	63.7	68.2	74.2	1.9	76.5	.9	31.0
		1718	727	4000	75.7	75.3	64.8	69.5	75.2	9	77.4	- .1	22.5
		1723	707	4217	83.1	79.9	71.2	76.4	82.5	.7	83.6	-2.6	13.5
		1743	707	3684	94.9	88.4	81.1	89.4	94.3	98.9	95.0	-4.0	11.5
		1819	580	3854	78.8	77.9	70.7	72.5	77.4	79.5	80.7	- .7	20.0
		1822	727	4218	79.5	78.5	66.0	70.6	76.0	76.8	77.6	2.7	41.5
		1825	727	3515	83.4	82.1	69.3	74.9	80.2	81.2	82.5	2.2	40.0
D	6-3	1919	720	4500	88.9	83.7	73.5	80.8	85.4	89.5	87.7	- .6	19.5
		1956	727	3742	82.0	80.7	69.4	74.1	80.2	80.8	80.9	1.2	29.0
		2106			78.6	77.5	64.7	69.8	75.1	76.7	76.8	1.9	34.5
		2110			69.2	71.3	62.6	66.7	70.5	71.5	71.3	-2.3	14.5
		2147			87.2	81.6	72.5	80.1	83.6	87.6	85.1	- .4	22.5
		2215			67.2	70.7	60.5	64.3	67.2	67.7	69.4	- .5	20.5
		2300			80.5	79.6	69.1	73.9	79.8	80.3	80.8	.2	20.5
D	6-4	0756	727	4296	81.9	81.2	69.5	77.9	79.2	80.2	80.9	1.7	30.0
		0801	737	4763	75.7	75.5	62.8	6 .9	72.9	73.5	74.5	2.2	34.5
		0804	720	4078	86.5	81.5	74.2	8 .0	85.3	89.0	86.5	-2.5	16.0
		0812	DC-8	4430	88.7	83.9	73.4	80.5	86.5	90.4	87.7	-1.7	19.0
		0827	DC-8	4569	85.4	83.9	72.2	86.2	81.3	83.8	83.7	1.6	31.5
		0832	727	3742	83.1	81.6	69.0	73.9	79.5	80.2	83.6	1.9	40.0
		0848	727	3625	78.4	78.3	68.8	72.8	78.7	80.3	79.6	-1.9	16.0
		0852	DC-9	5182	78.9	78.6	67.1	71.8	77.2	78.2	79.0	.7	30.0
		0854	BAC-111	4649	73.1	74.1	62.3	66.2	70.8	71.2	74.3	1.9	35.0
		0857	737	3771	78.8	77.9	66.8	71.4	76.9	77.6	78.5	1.2	27.5
		1527	727	3515	81.3	79.7	68.6	73.8	79.5	80.3	80.6	1.0	32.0
		1530	747	4423	87.3	84.9	74.5	80.2	86.2	88.9	87.3	-1.6	18.0
		1533	720	3896	89.6	84.1	75.5	83.7	88.6	93.1	89.6	-3.5	11.0
		1536	DC-8	4716	83.1	83.6	71.9	75.7	80.6	81.2	82.2	1.9	36.0
		1538	727	3468	81.4	80.1	70.4	75.0	81.1	82.0	82.3	- .6	23.5
		1545	720	4424	91.1	85.3	75.6	83.2	87.9	92.5	90.0	-1.4	18.5
D	6-4	1904	727	3362	72.5	71.5	59.8	66.4	72.1	72.7	75.3	- .2	21.0
		1911	DC-9	5429	74.4	74.9	62.1	66.8	72.0	73.0	74.2	1.4	36.5
D	6-5	1059	737	4209	77.4	7 .5	68.1	71.4	77.8	81.3	80.1	-3 9	0.5
		1103	DC-8	4410	90.7	8 .2	74.9	83.0	89.0	92.8	90.6	-2.1	21.0
		1106	DC-9	3569	85.4	8 .1	71.2	78.3	84.8	86.8	86.2	-1.2	19.0
		1113	727	4462	81.1	79.9	69.8	74.8	80.6	81.4	81.8	- .3	26.0
		1115	720	4078	74.2	72.6	63.4	69.7	75.3	77.5	77.9	-3.6	10.0
		1119	DC-8	4430	79.9	78.5	67.0	72.2	78.7	81.2	81.6	-1.3	26.0
		1338	DC-9	4471	80.6	80.0	68.9	74.1	79.5	80.3	81.7	.3	26.5
		1418	727	3932	82.4	80.3	70.4	75.5	81.5	8 .5	82.5	- .1	27.0
		1524	727	4296	82.2	80.8	69.6	75.1	81.0	81.7	82.5	.5	25.0
		1718	707	2598	94.3	89.0	81.7	89.9	94.0	97.4	95.2	-3.1	11.0
		1719	707	4279	85.0	81.3	74.3	81.8	86.1	88.7	87.6	-3.7	9.0

TABLE V (Cont'd)

Pen	Date	Time	A/C	Distance ft.	[illegible]	[illegible] dB	A-level dB	B-level dB	[illegible]	[illegible]	[illegible]	D dB	d sec
D	6-5	2106			80.6	86.0	70.0	87.2	91.2	93.2	90.3	- .9	17.5
		2126			80.7	84.2	70.7	81.0	87.8	88.8	86.2	-2.1	18.5
		2140			85.0	86.3	73.3	86.5	88.6	88.8	86.5	-3.5	12.5
D	6-6	0949	BAC-111	4770	88.2	78.1	67.1	61.4	66.0	67.4	71.9	.8	29.0
		0951	727	4730	74.1	74.8	61.7	66.6	71.3	71.8	74.3	2.3	40.5
		0958	720	3990	83.2	79.5	70.3	77.3	82.8	85.2	83.9	-2.0	17.5
		1033	DC-9	3982	82.8	80.9	71.0	77.1	81.0	85.4	84.8	-1.6	20.0
		1039	727	3760	81.4	80.0	70.8	75.7	81.5	82.4	82.2	- .8	19.5
		1042	DC-9	3684	79.9	77.7	70.8	75.7	81.3	82.6	81.8	-2.7	15.0
		1054	707	3680	82.8	86.4	77.6	85.9	91.2	95.6	92.2	-2.8	14.5
		1056	720	3676	86.0	81.1	72.6	79.9	84.5	88.1	86.9	-2.1	18.0
		1057	737	3630	77.9	76.4	66.1	71.5	76.8	77.8	78.4	.1	25.5
		1109	720	3992	86.4	80.9	73.7	80.5	85.4	89.3	86.9	-2.9	17.5
		1111	720	4579	88.3	82.4	72.4	80.5	85.5	90.5	87.7	-2.2	15.5
		1126	DC-8	4199	83.2	80.4	70.1	75.6	81.5	83.7	84.3	- .5	24.0
D	6-6	2019			88.2	82.8	74.6	81.8	88.0	92.2	89.1	-4.0	8.0
		2059			79.6	78.8	69.0	73.7	79.5	80.4	80.9	- .8	20.0
		2115			86.2	79.5	74.2	82.8	86.3	91.9	88.7	-5.7	6.0
		2119			88.8	81.0	69.4	77.3	83.7	87.9	86.1	-1.1	21.0
		2122			77.7	76.2	65.7	72.6	78.8	82.0	80.7	-3.3	11.0
		2126			84.5	81.6	71.0	76.9	83.5	85.3	84.4	- .8	29.0
		2129			89.4	83.0	72.5	80.1	86.1	90.2	87.9	- .8	23.0
		2139			83.2	79.6	67.0	72.6	78.5	81.7	82.1	1.5	33.5
		2141			79.7	76.8	63.3	68.4	73.7	75.3	77.8	1.4	37.0
		2152			81.3	78.8	67.8	73.4	79.6	80.5	80.8	.8	27.5
		2202											
D	6-7	0800	727	4000	73.9	81.5	70.9	74.9	79.7	79.7	82.1	-5.8	6.5
		0801	720	4745	83.0	81.1	68.9	74.9	80.9	82.2	82.9	+0.8	28.0
		0803	727	4296	87.1	81.1	71.4	79.7	84.6	89.3	85.7	-2.8	12.0
		0806	707	4099	80.7	78.6	67.3	73.0	79.4	81.0	80.6	-0.3	24.5
		0822	720	5118	88.7	84.4	73.8	80.5	86.4	90.0	87.9	-1.3	21.0
		0831	DC-8	4873	80.4	83.8	74.3	82.7	87.1	92.6	88.8	-2.2	15.5
		0833	727	4640	80.5	83.5	68.9	73.7	79.5	81.0	81.9	1.5	36.5
		0834	727	4218	78.4	78.2	68.4	73.4	79.3	80.0	81.8	-1.6	18.5
		0837	BAC-111	4770	81.7	80.9	70.9	76.6	82.7	83.3	84.0	-1.6	19.5
		0844	727	3362	79.6	78.9	68.8	72.8	78.1	79.1	80.1	0.5	27.0
		0845	580	3950	85.8	81.8	69.8	75.1	81.2	82.8	81.8	0.6	31.5
		0855	737	3620	82.2	80.5	72.4	78.8	78.6	80.3	82.7	-0.1	19.5
		0856	727	5273	78.4	76.9	66.8	72.1	78.0	78.8	78.8	-0.2	26.5
		0857	727	4070	77.4	77.7	67.8	73.9	77.1	78.0	79.4	-0.6	18.5
		0944	Vlso	4754	83.6	81.2	70.4	76.1	81.8	83.6	83.2	0	24.0
					78.4	77.8	67.8	71.7	77.2	77.2	78.9	1.2	24.5

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft	[illegible]	[illegible] dB	A-level dB	B-level dB	[illegible]	[illegible]	[illegible]	D dB	d sec
D	6-7	1042	BAC-111	8000	80.7	77.3	68.4	73.4	77.1	80.6	83.5	.1	25.0
		1045	DC-9	4651	79.1	76.8	69.0	73.7	[illegible]	[illegible]	[illegible]	-1.0	21.0
		1046	707	3932	87.1	83.6	78.8	73.7	[illegible]	[illegible]	[illegible]	-1.6	17.5
		1100	DC-8	4112	81.2	78.1	68.6	73.8	[illegible]	[illegible]	[illegible]	- .2	17.5
		1110	727	4183	81.6	78.5	70.0	74.2	[illegible]	[illegible]	[illegible]	- .7	18.0
		1112	720	3838	80.8	77.2	70.0	74.2	[illegible]	[illegible]	[illegible]	-1.0	18.0
		1120	707	4000	82.2	79.2	70.9	74.9	[illegible]	[illegible]	[illegible]	-1.4	18.0
		1131	DC-9	3845	80.2	77.2	70.2	74.2	[illegible]	[illegible]	[illegible]	- .3	19.0
		1145	727	3838	80.3	77.2	70.2	74.2	[illegible]	[illegible]	[illegible]	.2	19.0
		1154	DC-9	4585	81.9	78.8	71.2	75.2	[illegible]	[illegible]	[illegible]	-1.1	20.0
		1156	727	4088	81.8	78.8	69.6	74.5	[illegible]	[illegible]	[illegible]	- .9	21.5
		1226			80.6	78.6	69.5	74.5	[illegible]	[illegible]	[illegible]	-1.1	21.0
		1237	BAC-111	5931	74.5	74.6	65.7	69.3	74.0	75.8	77.2	-1.3	23.0
		1254	727	3685	82.2	80.7	72.1	77.0	82.9	82.9	83.4	- .7	25.5
		1312	580	3921	80.5	79.1	71.6	73.6	79.7	82.9	81.8	-2.4	17.0
		1328	DC-9	4145	78.9	77.6	67.4	72.7	78.5	79.2	79.6	- .3	18.0
		1338	DC-9	4071	76.2	74.9	68.2	72.9	79.0	79.2	78.3	-3.7	18.0
		1342	DC-9	3353	86.6	83.2	74.7	80.7	87.3	84.1	83.3	-1.8	17.0
		1345	727	3625	81.2	79.8	68.3	73.6	82.4	83.2	82.3	1.1	26.5
		1409	727	4183	81.2	80.3	71.4	76.1	79.2	83.2	83.3	-2.0	17.5
		1419	737	3771	81.1	78.3	66.8	72.9	79.4	84.8	84.5	.9	18.0
		1421	727	4070	79.7	76.7	71.7	77.2	83.7	82.4	81.9	-5.1	26.5
		1422	DC-9	4145	80.7	78.8	70.4	75.9	80.7	80.4	87.3	-1.7	24.0
		1424	DC-8	3735	82.0	83.9	74.0	78.7	86.7	79.4	79.7	.6	22.0
		1433	DC-9	4560	78.2	77.3	68.1	72.8	82.7	80.9	79.8	-1.2	23.5
		1437	DC-8	4067	91.2	85.3	75.8	82.7	74.9	82.2	81.6	- .3	23.5
		1441	880	4207	80.0	80.8	70.8	74.9	74.2	80.5	81.9	- .5	23.5
		1442	DC-9	4385	81.7	79.6	68.9	74.2	79.0	84.5	82.9	.1	23.5
		1506	727	4000	82.8	79.9	73.3	79.0	75.8	82.5	84.2	-3.1	15.5
		1508	727	4000	83.7	80.9	68.8	75.8	82.5	84.1	84.2	- .4	23.0
		1509	580	3511	70.8	75.1	66.3	71.3	76.0	78.2	78.7	-7.4	14.5
		1515	2-39	3800	78.3	79.1	68.9	72.2	77.2	77.8	79.5	.5	27.0
		1516	580	4051	78.5	78.5	70.8	72.3	77.2	80.1	80.9	-1.6	19.0
		1518	B-818	4667	74.9	73.1	63.1	72.7	77.0	79.2	80.4	-5.3	18.5
		1520	707	3932	85.5	80.6	78.7	87.1	82.6	82.0	82.6	-1.5	21.5
		1523	720	4078	88.2	87.8	78.5	82.5	88.8	88.6	88.4	- .4	22.5
		1527	747	2570	88.0	85.1	74.8	80.3	87.0	87.7	88.4	- .3	25.5
		1533	DC-8	4300	79.4	79.3	69.5	78.8	78.8	80.0	[illegible]	- .6	15.5
		1534	DC-8	4256	91.0	84.7	74.3	82.1	88.2	92.0	89.7	-1.0	17.0
		1537	727	3742	84.2	82.0	71.8	76.6	82.7	83.4	84.6	.8	26.0
		1540	727	3867	82.0	79.5	72.0	77.1	83.4	84.0	86.1	-2.0	17.0
		1542	720	4350	93.3	86.8	77.6	86.0	90.4	85.6	82.4	-1.7	18.0
		1547	DC-8	5304	84.9	81.3	69.9	76.0	82.5	86.6	85.3	-1.7	17.0
		1549	580	4514	79.3	79.7	70.3	72.1	76.9	80.2	80.4	- .9	18.5
		1550	720	4350	92.2	85.6	76.9	85.1	90.5	94.2	91.5	-2.0	19.5

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
D	6-7	1552	727	4377	84.2	82.2	71.1	76.7	83.0	83.6	84.9	.6	22.5
		1641	727	3682	89.2	85.6	75.7	81.3	87.3	89.1	88.8	.1	22.5
		1645	BAC-111	4195	87.8	87.4	81.0	85.1	90.5	81.4	81.5	-3.6	14.0
		1812	DC-9	3385	84.7	83.2	72.4	77.7	83.5	85.0	85.0	- .3	22.5
		1317	727	3053	83.4	81.9	72.4	78.3	85.1	86.4	85.7	-3.0	17.0
		1838	707	4099	92.8	85.5	76.5	84.7	89.3	93.8	90.4	-1.0	17.5
D	6-7	1910	727	4000	84.1	81.7	70.6	76.3	82.8	84.7	84.1	- .6	25.0
		1922	727	3515	80.1	79.2	67.2	72.3	77.9	78.6	79.5	1.5	35.5
		1925	727	4377	78.9	77.5	66.6	72.5	78.1	79.0	79.4	- .1	24.5
		1927	DC-8	4112	80.7	79.7	68.4	73.7	79.2	79.9	80.1	.8	27.5
		2102			82.0	78.6	69.2	74.1	81.0	83.1	83.7	-1.1	20.5
D	6-7	2208			83.2	79.4	70.6	77.5	82.0	86.2	84.8	-3.0	15.5
		2334			87.9	83.1	76.9	83.8	88.3	92.3	89.3	-4.4	9.5
D	6-8	1036			76.0	74.5	66.2	71.1	76.3	78.5	78.8	-2.5	16.5
		1043			83.1	77.1	69.4	77.3	82.7	87.4	84.1	-4.3	12.5
		1046			74.8	74.5	64.3	69.8	74.5	75.2	76.2	- .4	19.0
		1047			79.7	76.1	66.9	72.9	79.2	82.8	80.7	-3.1	10.0
		1049			75.5	76.4	66.6	70.1	76.0	79.2	78.4	-3.7	8.0
D	6-10	1945	580	4270	70.1	73.5	64.4	66.6	70.4	73.7	75.2	-3.6	11.0
		1959	727	3362	82.8	82.9	72.4	76.4	81.5	82.3	82.9	.5	25.5
		2046			77.5	78.3	66.0	69.0	74.2	76.3	76.0	1.2	35.0
		2058			88.7	87.4	76.5	81.3	87.3	89.6	88.2	- .9	23.0
		2136			73.7	73.0	62.0	66.8	71.3	72.6	74.3	1.1	23.0
D	6-10	2204			72.2	71.0	63.5	68.6	72.2	72.9	73.6	-2.7	17.0
		1420	727	5043	75.1	77.8	67.0	71.4	76.4	77.2	77.8	-2.1	15.5
		1500	VC-10	5255	83.0	82.9	73.8	77.6	82.9	83.1	84.2	- .1	23.0
		1557	707	5596	66.3	69.5	63.2	67.7	71.9	71.9	76.2	-5.6	6.0
		1608	747	3433	84.8	83.6	73.2	77.8	83.2	85.1	84.6	- .3	19.5
		1708	727	42.8	80.3	79.1	67.5	72.9	78.8	79.4	79.6	.9	30.0
		1732	707	4619	91.8	85.4	77.3	85.5	89.7	94.5	91.1	-2.7	13.5
		1852			72.8	72.8	63.5	69.9	75.6	79.6	78.8	-6.8	5.0
D	6-11	1910	707	5196	90.3	83.7	75.9	84.0	89.7	93.7	90.9	-3.4	12.0
		1914	727	4218	79.2	77.8	65.2	70.4	76.0	77.4	77.6	1.8	34.0
		1921	727	3013	87.6	84.4	74.5	81.0	87.5	89.3	88.9	-1.7	19.0
		1941	727	3625	84.7	82.2	71.5	78.0	84.5	87.5	86.1	-2.8	18.5
		1948	727	3803	80.6	79.2	66.4	71.6	77.1	77.8	78.9	2.8	36.0
		1951	727	6629	80.9	79.3	69.4	75.1	80.5	81.2	81.5	- .3	20.5
		2010			84.4	81.1	69.7	75.6	81.5	83.7	82.8	.7	30.0
		2013			81.3	79.5	67.8	72.8	78.3	79.1	80.6	2.2	29.5
		2032			79.7	79.7	70.4	74.8	79.6	80.8	82.3	-1.1	17.0
		2107			62.5	64.9	60.8	65.3	69.3	70.3	70.8	-7.8	4.0
		2146			84.4	81.4	71.4	77.2	83.4	84.9	84.5	- .5	22.0
		2151			77.1	75.9	64.0	68.9	75..	76.5	76.8	.6	23.5

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBD	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
E	6-2	1552	72[illegible]	4350	80.1	78.7	68.2	73.0	78.4	79.5	81.3	.6	20.5
		1618	7[illegible]	3252	81.0	88.5	77.8	82.9	89.1	89.7	91.5	.3	34.0
		1647	DC-9	4621	78.7	76.7	66.7	71.8	78.6	79.2	79.8	- .5	24.0
		1652	727	3480	88.0	84.1	75.0	80.8	87.6	88.2	88.2	- .2	25.5
		1715	720	4398	83.6	83.2	74.8	82.7	86.7	91.5	88.8	-7.9	4.0
		1717	727	4000	75.3	75.7	69.2	74.0	79.5	89.2	82.6	-8.9	9.5
		1835			82.9	78.8	69.3	74.8	80.2	83.8	81.9	- .9	18.0
E	6-3	1415	DC-8	5659	78.6	74.6	66.4	73.0	79.1	82.4	80.0	-3.8	12.0
		1417	727	5523	77.7	76.3	66.0	71.1	77.2	78.1	78.6	- .4	21.0
		1419	DC-9	3976	84.7	81.1	71.5	78.0	85.0	87.6	86.5	-2.9	14.5
		1427			79.5	77.5	69.3	74.2	80.2	81.0	81.5	-1.5	18.0
		1516	707	4004	92.2	85.7	77.9	86.1	91.0	95.5	92.8	-3.3	12.5
		1522	VC-10	4051	80.0	81.9	73.7	78.6	84.2	85.2	86.8	-5.2	8.0
		1524	747	4058	36.3	83.3	74.4	79.6	85.6	87.7	87.4	-1.4	18.5
		1527	DC-8	3987	84.7	84.5	77.8	81.8	88.0	89.0	88.8	-4.3	12.0
		1539	DC-8	3978	86.2	81.3	71.6	78.2	83.7	86.2	86.0	.0	20.5
		1713	727	3782	71.6	73.1	63.4	67.5	72.1	72.5	73.2	- .9	19.0
		1741	707	3968	88.7	83.2	73.7	80.4	86.7	90.9	88.1	-2.2	16.0
		1821	727	4350	80.0	78.5	66.9	71.8	78.5	79.0	79.8	1.0	24.5
		1824	727	3702	82.8	82.0	71.5	76.4	82.1	83.1	83.0	- .3	26.0
E	6-3	1934	720	4036	82.9	80.3	72.8	80.1	83.5	86.0	85.3	-3.1	13.5
		1944	727	5194	76.4	77.2	67.5	72.6	77.3	77.8	79.1	-1.4	18.5
		2136			81.2	77.5	64.4	70.6	77.0	81.2	78.7	0	21.0
		2146			78.9	75.0	64.8	72.0	76.2	79.8	77.8	- .9	22.0
E	6-3	2259			67.9	69.3	59.5	64.2	68.3	68.8	69.9	- .9	18.0
E	6-4	0802	720	4036	83.9	79.4	70.6	77.8	81.9	85.5	84.1	-1.6	18.5
		0850	DC-9	5104	76.9	77.2	67.0	71.7	76.8	77.5	79.6	- .6	20.0
		0918	727	4646	74.8	75.5	63.4	68.2	73.1	73.8	74.3	1.0	33.5
		0929	BAC-111	5058	76.2	75.4	63.7	68.7	74.8	75.5	77.5	.7	34.0
		1526	727	4405	77.1	75.9	63.7	69.1	75.2	76.4	78.2	.7	28.0
		1528	747	7113	81.2	77.8	67.6	73.4	80.3	82.5	81.1	-1.3	19.5
		1533	720	3764	88.7	82.8	74.3	82.3	87.4	91.1	88.9	-2.4	12.5
		1543			80.9	80.2	68.7	73.8	79.4	81.5	81.8	- .6	22.0
		1546	727	3824	71.6	71.4	66.7	73.6	77.8	77.8	81.9	-6.2	7.5
		1547	727	4350	77.6	77.2	68.1	72.8	78.2	78.2	79.5	- .6	22.0
		1558	727	4142	81.1	79.9	69.7	74.3	81.0	8[illegible].0	81.9	.1	22.5

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
F	6-5	1059	737	3992	78.3	77.2	66.1	69.6	75.7	78.6	78.5	- .3	23.0
		1102	DC-8	3474	93.6	86.4	77.4	85.5	91.7	94.5	92.2	- .9	18.5
		1105	DC-9	3615	81.2	78.4	78.2	75.0	80.5	82.2	82.4	-1.0	18.0
		1107	707	5017	90.4	85.2	73.5	81.0	87.2	90.2	89.5	.2	24.5
		1112	727	4243	80.9	80.0	69.6	74.3	80.1	81.1	81.0	- .2	22.0
		1116	737	3778	77.2	75.5	66.1	70.4	75.7	77.3	78.6	- .1	26.5
		1119	DC-8	3987	79.1	78.1	66.4	70.7	76.2	78.6	78.2	.5	28.0
		1405	BAC-111	3850	73.9	74.2	64.1	68.7	74.5	74.5	79.0	- .6	22.0
		1421			81.8	79.6	68.2	73.7	79.9	81.3	82.1	.5	28.0
		1425	DC-8	3847	90.1	84.4	75.0	82.7	88.9	92.5	90.8	-2.4	13.5
		1717	707	2596	93.0	87.6	80.6	88.4	92.4	94.6	92.9	-1.6	14.5
		1719			90.7	85.1	77.8	85.7	89.6	94.1	91.0	-3.4	11.0
F	6-5	1953			91.6	87.6	78.0	84.2	91.2	92.4	92.2	- .8	16.0
		2114			81.2	79.4	68.6	73.7	79.0	81.8	80.3	- .6	21.5
		2126			86.9	82.2	73.0	79.7	86.0	89.8	87.9	-2.9	19.5
		2139			85.3	81.7	71.5	78.2	83.7	86.4	85.9	-1.1	19.0
F	6-5	2256			88.2	82.2	72.6	80.6	85.2	90.3	87.3	-2.1	19.5
F	6-6	0701	DC-8	5382	88.5	78.9	76.2	77.9	83.5	87.6	84.5	-3.1	12.5
		0849	727	4046	76.3	76.7	65.7	70.2	75.4	75.9	78.1	.4	25.0
		0921	727	3813	81.5	79.4	69.0	74.2	80.3	81.7	82.1	- .2	24.0
		0938	720	3591	87.3	82.1	74.5	81.7	86.6	89.9	87.3	-2.6	12.5
		1024	DC-9	4509	78.7	76.0	70.7	75.1	80.9	81.9	81.4	-3.2	15.5
		1038	727	3610	80.8	79.4	69.3	74.4	80.4	81.2	81.3	- .4	20.5
		1050	707	3699	93.4	86.7	77.8	86.0	91.2	95.4	92.8	-2.0	16.5
		1054	720	3375	86.1	81.1	73.2	80.6	84.8	88.3	86.5	-2.2	17.0
		1056	727	4192	82.7	80.3	71.3	77.2	83.5	84.7	84.2	-2.0	15.0
		1138	720	3791	86.9	81.7	73.5	80.2	86.2	90.0	86.9	-3.1	17.0
		1807	DC-8	3916	87.4	85.7	75.7	79.9	85.5	86.5	86.7	.9	32.5
		1815	720	4203	79.6	76.8	67.4	72.7	78.7	81.7	80.7	-2.1	15.0
		2007			79.4	78.0	67.6	72.8	78.4	81.3	81.5	-1.7	20.5
		2058			83.4	81.1	70.0	75.4	81.8	82.5	83.0	.9	27.5
F	6-7	0708			80.9	79.0	69.5	74.4	80.1	81.2	82.2	- .3	16.0
		0751	720	3919	85.0	80.6	70.3	77.5	82.3	85.0	84.3	0	26.5
		0757	727	3707	85.2	82.6	70.9	76.6	82.9	83.5	84.3	1.7	31.0
		0758	720	4209	87.2	81.6	70.3	78.7	82.7	87.7	86.1	- .5	20.5
		0801	727	4094	80.1	78.6	67.7	72.9	78.5	79.5	79.8	.6	31.5
		0804	707	3828	88.0	83.3	76.4	83.3	88.3	92.3	89.5	-4.3	11.5
		0818	707	4004	85.1	81.9	72.2	78.7	83.9	85.8	86.0	- .7	21.0
		0819	720	5084	88.4	81.8	72.6	80.7	85.9	90.9	87.0	-2.5	12.5
		0822	Lear	4300	72.6	71.7	62.5	67.5	72.6	75.0	75.1	-2.4	13.0
		0825	Lear	4147	74.8	75.0	64.3	69.0	73.9	75.3	77.3	- .5	16.5
		0828	707	6419	76.9	76.1	65.7	70.8	76.9	77.5	79.1	- .6	21.5
		0830	707	4279	80.2	79.6	68.3	73.0	78.4	80.5	81.0	- .3	23.0
		0832			79.8	80.1	69.3	74.5	80.4	81.9	80.8	-2.1	19.0
		0833	727	4680	79.2	79.3	66.8	72.1	77.2	77.6	79.7	1.6	28.5
		0852	737	3620	74.1	73.8	64.2	69.1	74.2	74.9	76.8	- .8	20.5
		0854	727	4094	77.8	77.5	65.3	70.1	75.4	76.1	78.2	1.7	29.5
		0834	727	3954	83.4	80.6	71.3	77.8	83.9	85.3	84.6	-1.9	17.5
		0836	B-80	3980	78.8	76.4	67.7	73.6	79.8	82.8	83.4	-4.0	17.0
		0840	VC-10	9852	73.6	74.2	62.4	66.9	72.1	74.0	73.6	- .4	23.0
		0842	737	5221	70.3	71.7	61.5	66.0	70.8	70.8	73.8	- .5	23.5
		1006	580	3646	79.4	79.0	70.0	71.7	77.1	80.6	79.7	-1.2	15.0
		1008	DC-9	3976	86.7	84.3	74.0	80.2	85.9	86.7	88.6	0	37.0
		1017	727	3849	78.1	77.4	67.0	71.6	76.8	77.4	78.2	0.7	27.0
		1022	580	3537	74.9	76.4	68.4	70.4	75.4	78.0	78.6	-3.1	8.5
		1036	707	3762	84.1	82.0	69.9	74.8	80.9	82.3	83.4	1.8	33.5
		1041	580	3338	80.8	78.5	68.0	71.9	77.6	80.4	81.2	.4	24.0
		1042	DC-9	4071	80.0	78.2	68.5	73.8	79.3	80.6	80.9	- .6	19.5
		1051	707	4079	86.0	81.8	70.8	77.6	83.6	87.9	85.6	-1.9	16.0
		1053	737	4113	73.3	72.9	63.4	67.8	72.6	73.8	74.8	- .5	23.5
		1101	DC-9	3977	80.0	78.8	68.5	74.2	79.7	80.6	80.8	- .6	20.5
		1103	727	4250	77.1	77.1	66.5	71.1	76.2	77.8	78.3	- .7	22.0

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLMN PNdB	PNLC PNdB	D dB	d sec
F	6-7	1106	DC-8	3812	91.9	84.7	75.0	83.3	89.2	93.1	90.2	-1.2	20.0
		1107	727	3782	78.5	77.9	66.1	72.0	77.7	78.2	79.0	.3	23.0
		1109	720	3693	92.1	85.6	77.7	86.1	90.4	95.0	91.4	-2.9	13.0
		1116			78.0	77.5	67.3	70.3	75.9	79.1	78.5	-1.1	17.0
		1118	720	6314	78.8	74.5	65.9	72.4	78.1	81.7	79.2	-2.9	11.0
		1126	580	4309	75.1	76.2	66.8	69.6	75.4	78.5	77.4	-3.4	14.0
		1128	DC-9	3717	85.4	81.2	71.1	78.1	84.3	85.4	85.4	0	23.5
		1143	727	4800	82.4	80.0	68.7	73.9	79.5	80.7	82.1	1.7	31.0
		1146	Lear	4607	64.8	69.7	60.6	64.5	69.1	69.9	72.4	-5.1	10.5
		1147	B-80	5175	74.6	72.7	62.9	71.5	75.3	76.5	78.8	-1.9	16.5
		1150	DC-9	4170	80.1	78.4	68.9	75.2	81.0	82.6	83.2	-2.5	12.0
		1158	DC-9	3800	77.4	75.8	65.8	70.9	76.9	78.4	80.5	-1.0	25.0
		1215	Jet Star	4905	82.3	82.6	73.0	76.8	81.5	82.0	84.5	.3	23.5
		1230	DC-9	4275	81.4	78.9	68.7	75.1	80.8	82.2	82.7	- .8	20.5
		1251	727	4080	78.2	78.5	68.5	73.4	78.3	78.8	80.3	- .6	18.5
		1309	580	3537	71.0	78.4	69.2	72.7	77.7	81.2	79.9	-10.2	2.0
		1321	DC-9	3976	82.4	78.6	72.5	78.9	85.5	87.1	85.7	-4.7	10.0
		1326	737	4052	73.4	75.2	64.7	69.9	75.7	76.6	77.3	-3.2	15.5
		1338	DC-9	3600	83.4	80.5	71.4	77.8	84.0	85.2	85.0	-1.8	15.0
		1342	727	3346	82.5	81.3	71.5	76.6	81.5	81.9	85.0	.6	24.0
		1359	DC-9	4218	78.1	76.0	66.0	71.6	78.0	78.9	80.1	- .8	21.5
		1405	727	3910	81.4	79.9	69.9	74.9	80.1	81.2	81.7	.2	21.5
		1411	DC-8	4430	88.4	83.0	72.3	79.3	86.0	89.0	87.1	- .6	20.0
		1413	707	3932	86.6	82.3	74.0	81.7	86.4	90.1	87.6	-3.5	12.5
		1417	727	3824	82.0	79.7	71.0	76.4	82.2	83.1	82.9	-1.1	20.0
		1420	DC-8	3611	88.3	82.7	74.3	81.3	87.1	89.2	87.8	- .9	24.0
		1422	B-80	5175	81.1	76.1	67.7	75.4	81.8	81.8	83.8	- .7	17.5
		1426	727	4533	90.2	86.4	75.1	80.7	87.6	89.4	90.0	.8	27.0
		1434	DC-8	3660	91.6	85.0	76.4	84.0	90.6	93.1	91.4	-1.5	21.0
		1445	727	3777	73.5	77.6	67.7	72.2	78.9	80.1	80.7	-6.6	4.0
		1501	VC-10	4378	84.2	83.6	76.9	81.7	87.3	88.1	89.2	-3.9	9.5
		1517	580	3822	82.7	81.5	71.7	75.4	81.5	83.1	83.9	- .4	17.0
		1520	707	3600	93.9	87.3	76.9	85.2	90.5	94.4	92.1	- .5	23.0
		1523	720	3800	87.8	86.9	75.5	79.9	85.2	86.0	87.1	1.8	33.0
		1535	DC-8	3893	85.7	81.3	70.5	78.0	83.7	88.3	86.6	-2.6	15.0
		1537	727	3222	83.0	80.9	70.3	75.4	81.9	82.7	83.3	.3	24.0
		1540	727	3741	84.7	82.4	72.4	77.3	84.1	86.3	85.8	- .6	25.5
		1542	720	3728	94.3	87.1	79.2	87.5	92.4	97.0	93.5	-2.7	13.0
		1547	DC-8	3716	85.9	81.1	68.8	74.8	81.9	85.8	84.9	.1	26.0
		1548	580	3822	81.9	79.3	70.0	72.5	78.3	81.7	80.9	.2	22.5
		1551	720	3591	91.2	84.6	76.0	84.0	89.2	92.7	90.4	-1.5	16.5
		1553	727	3824	82.1	80.2	69.6	75.1	81.3	82.1	81.9	0	27.5
		1556	727	4046	81.4	80.0	69.3	74.8	81.2	81.3	83.6	.1	17.0
		1610	737	3525	74.4	73.8	64.7	69.3	74.9	75.6	77.2	-1.2	19.5
		1626	BAC-111	4488	76.5	77.4	66.8	74.6	78.5	81.0	84.3	-4.5	11.0
		1640	727	3252	86.4	83.1	72.1	78.0	84.4	86.3	85.6	.1	28.5
		1647	BAC-111	3704	88.1	86.5	77.4	81.9	87.5	88.8	89.5	- .7	27.5
		1654			75.9	72.7	67.3	75.6	79.8	81.4	80.9	-5.5	6.5
		1758	727	4071	79.7	78.6	70.9	76.6	82.2	83.6	83.2	-3.9	13.0
		1812	DC-9	3931	84.3	82.2	71.9	77.5	83.9	86.7	85.7	-2.4	18.5
		1843			76.8	78.6	69.9	74.4	79.4	79.4	81.3	-2.6	11.5
		1844			82.2	80.0	70.1	75.9	81.8	83.0	83.4	- .8	20.0
F	6-7	1901	720	4833	82.5	77.9	68.5	75.5	80.2	82.4	82.4	.1	23.0
		1924	DC-9	4275	76.0	75.4	64.3	69.2	74.7	74.7	76.4	1.3	29.0
		1931	727	3961	83.7	81.4	70.2	76.8	83.7	84.2	84.9	- .5	23.0
		1947	727	3700	78.3	78.0	67.3	71.7	77.1	77.7	79.0	.6	24.0
		1957			79.9	80.4	7 .8	75.0	80.0	80.5	81.6	- .6	26.5
		2000			81.4	79.7	69.7	75.5	81.9	83.5	83.8	-2.1	17.5
		2008			79.3	78.4	69.0	74.1	78.9	80.0	80.8	- .7	17.0
		2012			70.9	75.6	65.2	72.4	77.5	78.9	80.9	-8.0	3.5

TABLE V (Con't)

Pos	Date	Time	A/C	Distance Ft.	EPNL EPNdB	SENEL dB	A-level dBA	D-level dBD	PNLM PNdB	PNLTM PNdB	PNLC PNdB	D dB	d sec
F	6-7	2023			86.4	81.9	69.8	76.4	83.7	85.5	85.0	.9	38.5
		2101			84.1	80.0	72.4	76.5	84.0	87.5	85.6	-3.4	12.0
		2103			92.1	85.2	77.5	85.9	90.0	94.7	91.0	-2.6	11.0
		2149			78.6	74.8	63.0	70.4	75.4	79.5	78.4	- .9	23.5
F	6-7	2200			83.5	79.7	69.7	75.9	82.0	85.6	83.2	-2.1	19.5
F	6-8	1035			78.1	76.4	67.6	73.8	79.5	80.9	79.9	-2.8	16.0
		1043			85.3	79.5	72.6	80.3	85.1	89.0	86.1	-3.7	12.0
		1051			79.4	78.3	70.0	74.7	80.6	82.5	81.6	-3.1	13.5
F	6-10	1959			81.6	81.7	70.9	75.0	80.5	81.5	82.9	.1	22.0
		2046			70.1	78.3	67.7	72.4	77.1	77.9	80.9	-6.8	4.5
		2058			87.5	86.3	75.6	79.6	85.7	88.8	87.4	-1.3	22.0
F	6-10	2207			78.5	79.2	69.1	73.5	78.2	78.9	79.1	- .4	27.0
F	6-11	1852	720	[illegible]	78.0	76.5	67.6	78.7	82.1	83.7	85.?	-5.7	7.5
		1854	BAC-111	[illegible]	73.9	75.2	64.7	69.3	74.8	76.0	77.9	2.1	14.5
F	6-11	1904	DC-8	[illegible]	86.8	81.2	71.6	79.5	84.7	89.1	88.6	-2.3	16.5
		1905	720	[illegible]	73.2	73.2	65.7	71.4	78.0	79.6	80.0	-6.4	6.0
		1921	707	[illegible]	92.1	85.5	78.2	86.5	90.0	95.9	92.1	-3.8	10.0
		1934	727	[illegible]	76.0	73.2	70.9	77.1	80.2	83.7	85.2	-7.7	3.5
		1943	727	[illegible]	82.6	83.2	71.7	77.0	82.6	82.6	85.4	0	21.0
		1958			76.3	73.5	67.7	75.3	79.2	80.8	84.1	-4.5	6.0
		1941			86.1	83.4	72.8	80.5	87.2	89.2	88.8	-3.1	15.5
		1944			81.5	74.1	72.0	78.1	81.9	83.7	85.6	-2.2	13.5
		1946			79.2	78.6	67.5	72.2	77.6	78.6	80.5	.6	24.0
		1947			81.3	78 9	67.5	73.6	80.0	80.1	82.2	1.2	27.0
		1954			83.3	81.2	70.8	77.1	83.5	84.7	85.2	-1.4	20.0
		[illegible]			84.8	81.5	68.5	74.0	80.3	82.8	82.8	2.0	32.5

taken at the individual sites. In identification, no attempt was made to distinguish between the various models of 707 and DC-8 type aircraft or to distinguish between turbojet and turbofan models.

Distance information was established from the photographs after identification of the aircraft and from knowledge of key dimensions of the aircraft. Photographs were taken at the ground position essentially at the point of closest approach of the aircraft to the observer.* Although distance information is reported in four significant figures in Table V, accuracy is limited to the order of ±5%.

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* For the measurements, the distance from the ground observer to point of closest approach is equivalent to the slant distance which may be defined as the length of an imaginary straight line passing through the point of interest on the ground and the aircraft flight path, which forms the hypotenuse of the vertical right triangle whose legs are normal to the flight track on its tangent. The slant distance and distance to point of closest approach are nearly equal because of the relatively small descent angles involved.

The noise measures tabulated in Table V are identified as follows:

Measure	*Unit*	*Meaning*
EPNL	EPNdB	Effective perceived noise level calculated in accordance with FAR Part 36.[4] The EPNL is equal to: EPNL = PNLTM + D.
SENEL	dB	Single event noise exposure level as defined in Reference 5 with the exception that the summation included only the upper 10 dB of the flyover noise signal.*
A-level	dBA	A-weighted sound level as specified in USA standards for sound level meters, S1.4.[7]
D-level	dBD	D-weighted sound level as specified in SAE ARP 1080.[8] For many flyover signals, the following approximate relationship holds. PNLM = D-level + 7
PNLM	PNdB	Maximum perceived noise level as defined in FAR Part 36.
PNLTM	PNdB	Maximum tone-corrected perceived noise level as defined in FAR Part 36.
PNLC	PNdB	Composite perceived noise level, computed from the highest levels reached in each of the one-third octave frequency bands irrespective of time.[9]
D	dB	Duration correction as defined in FAR Part 36.
d	sec	Duration time as defined in FAR Part 36.

* SENEL is defined in terms of integration (summation) from a threshold noise level approximately 30 dB below the maximum level. However, integration over only the upper 10 dB results in values that typically differ by 0.3 dB or less from values based on integration over 30 dB.[6]

IV. EPNL AND NEF COMPUTATIONS AND COMPARISONS

Mean EPNL and NEF values calculated from the measured noise data are given in the later part of this section. The mathematical basis for calculating these noise values is summarized in the first part of this section.

A. NEF and EPNL Equations

The noise exposure forecast procedures yield estimates of the noise exposure based upon consideration of the noise levels, expressed in EPNdB, the number of noise intrusions and the time of day in which the noise intrusions occur. The contribution to the NEF value at a given position for a given day for a single flyover event, i, may be expressed as follows:

$$NEF(i) = EPNL\ (i) + 10 \log K(i) - 88 \qquad \text{(Eq. 1)}$$

where

EPNL(i) = effective perceived noise level produced by flyover (i).

K(i) = constant determined by the time of occurrence, where,

K(i) = 1, for times between 0700 to 2200

K(i) = 16.67 for times between 2200 to 0700.

When a number of noise intrusions of differing levels occur during the day, the noise exposure forecast value for a given position and day may be expressed as:

$$NEF = 10 \log \sum_{i=1}^{N} \text{antilog} \frac{NEF(i)}{10} \qquad \text{(Eq. 2)}$$

$$\text{or, } NEF = 10 \log \sum_{i=1}^{N} \text{antilog} \left(\frac{EPNL(i) + 10 \log K(i)}{10} \right) - 88 \qquad \text{(Eq. 2a)}$$

where $N = N_D + N_N$

N_D = number of events between 0700 to 2200

N_N = number of events between 2200 to 0700

For the rather special case where the same noise level is produced by a number of events, Equation 2 becomes:

$$NEF = EPNL + 10 \log [N_D + 16.67\ N_N] - 88 \qquad \text{(Eq. 2b)}$$

As can be seen from Equation 2b, in particular, the NEF values are significantly affected by the number and time of the noise occurrences as well as the noise level.

In determining the changes in noise environment due to the changes in approach procedures at DTW, the changes in noise levels and the corresponding change in NEF values are of primary interest. The large variability in the number of IFR approaches on Runway 21R may be considered to be an uncontrolled "random" test variable, which, through its influence on NEF values, might well obscure NEF changes due to changes in noise levels. Thus, to provide meaningful comparisons of noise exposure between test phases, one wishes to determine "mean" noise levels, for the various test days and test phases. The various mean noise levels can also be used in adjusting "raw" NEF values to account for flights occurring between 2400 and 0600 that were not measured. From mean noise level values, one can also establish the differences in NEF values which result from differences in noise levels, un-obscured by the wide variation in number of events occurring during particular test periods.

In determining mean noise level values for NEF computations, the "energy mean" value will be of primary interest, reflecting the fact that the sound pressure noise levels are expressed as logarithms of the sound pressures involved. The energy mean value, $\overline{EPNL}$, (termed "mean" throughout the remainder of the report) can be defined as:

$$\overline{EPNL} = 10 \log \frac{1}{N} \sum_{i=1}^{N} \text{antilog} \frac{EPNL(i)}{10} \qquad \text{(Eq. 3)}$$

If the mean EPNL is first calculated from all the noise events measured during a certain period during the day, the NEF value may then be estimated from Equation 2b, using $\overline{EPNL}$ from Equation 3:

$$NEF = \overline{EPNL} + 10 \log [N_D + 16.67\ N_N] - 88 \qquad \text{(Eq. 2c)}$$

The above expression will serve as the major equation for calculating NEF values from the experimental data.

The standard deviation is a commonly used statistical measure of the variability of a distribution of numbers. The standard deviation for $\overline{EPNL}$, $\bar{s}$, may be defined as:

$$\bar{s} = 10 \log \left\{ 1 + \frac{\left[\frac{\sum_{N} \left(\text{antilog} \frac{EPNL(i)}{10} \right)^2 - \left(\sum_{N} \text{antilog} \frac{EPNL(i)}{10} \right)^2}{N(N-1)} \right]^{1/2}}{\frac{1}{N} \sum_{1}^{N} \text{antilog} \frac{EPNL(i)}{10}} \right\} \qquad \text{(Eq. 4)}$$

Although not of immediate interest, but likely to be of concern in other analyses of the noise and distance information, the arithmetic mean of the EPNL values may be defined as:

$$EPNL_{ave} = \frac{1}{N} \sum_{i}^{N} EPNL\ (i) \qquad \text{(Eq. 5)}$$

The mean level (Eq. 3) will always be equal to, or greater than, the arithmetic mean (Eq. 5):

$$\overline{EPNL} \geq EPNL_{ave}$$

The standard deviation for the arithmetic mean, s, is defined as:

$$s = \left[\frac{\frac{1}{N} \sum_{i}^{N} \left(EPNL(i) \right)^2 - \left(\sum_{i}^{N} EPNL(i) \right)^2}{N(N-1)} \right]^{1/2} \qquad \text{(Eq. 6)}$$

To illustrate the differences between values computed on an energy or arithmetic basis, the following table shows the mean values and standard deviations computed for four noise levels of 90, 94, 96 and 100 EPNdB.

Quantity	Value	Equation
$\overline{EPNL}$	96.4	3
$\bar{s}$	2.8	4
$EPNL_{ave}$	95.0	5
s	4.2	6

B. Mean Noise Levels

Table VI lists the mean noise levels, calculated in accordance with Equation 3, for each day at each position. Mean levels are also listed for each phase of measurement at each position. Also shown are the mean levels at each position during the two phases for: four-engine jet aircraft, two- and three-engine jet aircraft and propeller aircraft. The table also lists standard deviations, calculated in accordance with Equation 4.

The mean noise levels for each day are also shown in Fig. 6 together with the standard deviation for each day. The dashed lines in the figure show the mean values for the entire test phase at each position.

At position A, note the very small difference (0.3 dB) between mean EPNL values for the two measurement phases. Also note that the differences in mean values at position A were also quite small for the four-engine jet aircraft (1.0 dB) and for the two- and three-engine jet aircraft (1.3 dB).

C. Daily NEF Values

NEF values, calculated from the mean noise levels in accordance with Equation 2c, are tabulated in Table VII and are also shown graphically in Fig. 7. Table VII lists two sets of NEF values. The "raw" values are based upon the mean noise levels and the observed number of flights during the observation periods from 0600 to 2400. "Adjusted" NEF values are also shown; these values reflect adjustments for the IFR landings on runway 21R occurring between 2400 and 0600 which were not measured.

TABLE VI

MEAN EFFECTIVE PERCEIVED NOISE LEVELS

Test Phase	Aircraft	Period	$\bar{L}$ EPNdB	s EPNdB	n	$\bar{L}$ EPNdB	s EPNdB	n	$\bar{L}$ EPNdB	s EPNdB	n	$\bar{L}$ EPNdB	s EPNdB	n
				A			B			C				
Initial	All	May 18	96.5	4.4	137	88.7	4.2	58	85.4	4.0	64			
		19	96.0	3.8	43	93.5	3.6	22	90.8	4.6	24			
		20	97.7	4.9	22	90.9	4.4	18	89.5	4.4	23			
		23	92.8	4.3	34	86.1	3.6	19	85.5	4.1	19			
		24	101.4	3.5	19	96.4	4.3	18	94.8	4.2	20			
		25	100.3	4.2	43	92.6	3.6	29	92.7	3.9	26			
		May 18-25	97.6	4.6	298	91.9	4.8	164	90.3	5.1	176			
	4-Eng. Jet	"	100.6	3.4		94.7	4.2		94.0	3.8				
	2-,3-Eng.Jet	"	92.0	3.2		86.9	3.9		85.0	5.1				
	Prop	"	84.4	2.9					78.7	3.3				
				A			D			E			F	
A	All	June 2									7			
		3	98.1	4.3	24	87.6	2.5	5	85.6	3.5	18			
		4	97.8	3.8	44	85.9	4.6	26	84.4	3.9	11			
		5	98.7	3.8	41	87.7	3.7	14						
		6	95.9	3.5	40	85.2	3.5	23				88.2	3.2	17
		7	97.8	4.5	181	86.4	3.9	74				85.9	3.8	14
		8	92.0	6.1	19	79.1	2.8	5				84.9	4.1	96
		10	94.5	4.2	21	82.4	4.3	6				82.1	2.9	3
		11	95.2	3.8	29	84.2	3.9	20				82.9	3.6	4
		June 2-11	97.3	4.4	422	85.8	4.0	191	84.0	3.8		84.3	4.1	14
												85.4	3.9	148
	4-Eng. Jet	"	101.6	3.2		89.6	2.9					88.8	3.0	
	2-,3-Eng.Jet	"	93.3	2.9		82.4	3.3					81.7	3.3	
	Prop	"	87.6	1.7		78.2	2.3							

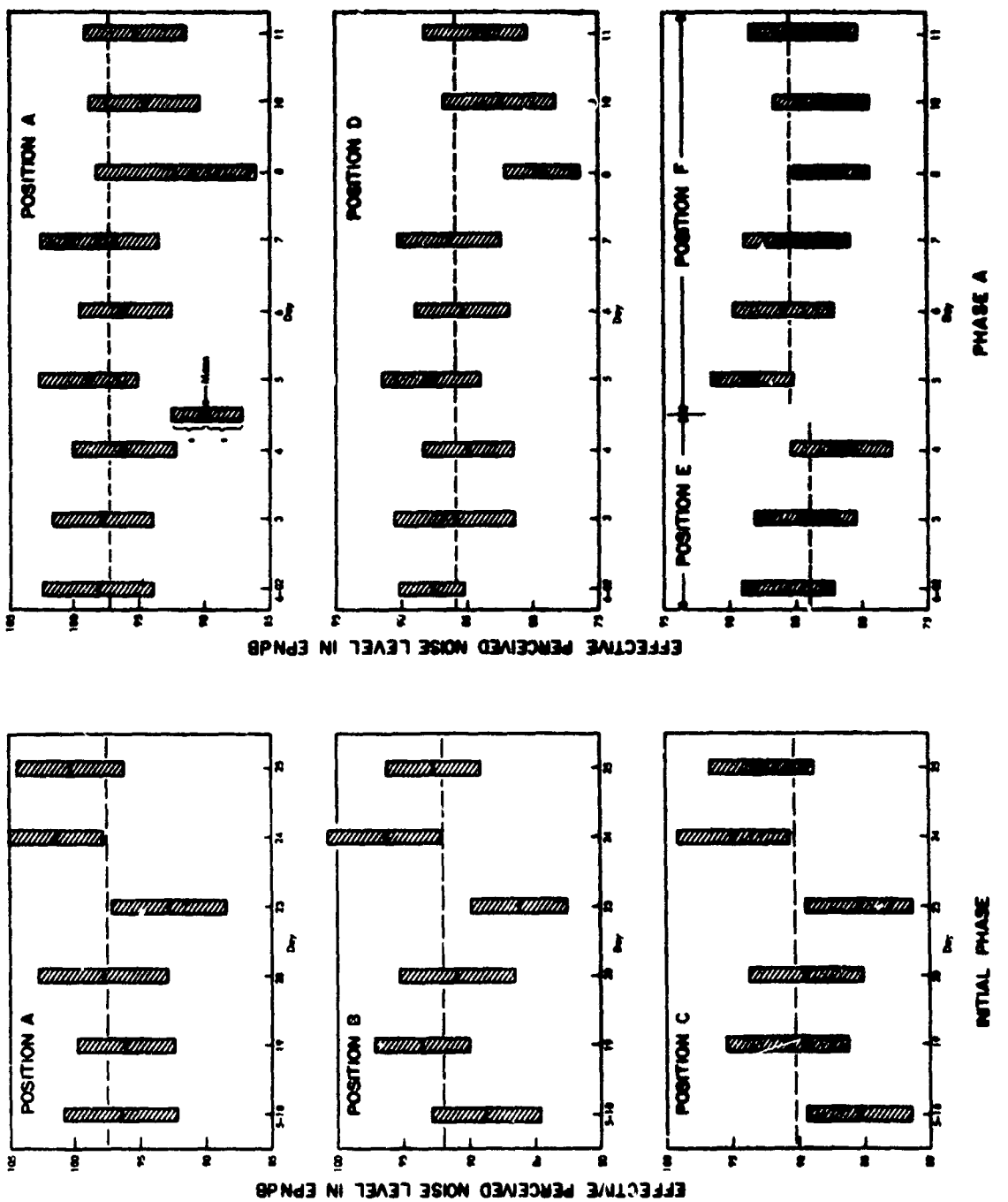

FIGURE 6. MEAN EFFECTIVE PERCEIVED NOISE LEVELS

TABLE VII

DAILY NOISE EXPOSURE FORECAST VALUES

Test Phase	Period	NEF Values							
		RAW	ADJ	RAW	ADJ	RAW	ADJ	RAW	ADJ
		A		B		C			
Initial	5-18	32.4	36.7	21.4	25.7	18.0	22.7		
	5-19	32.7	36.2	25.9	31.2	22.6	28.3		
	5-20	32.5	36.7	23.2	27.1	22.6	26.5		
	5-23	28.1	28.1	18.2	18.2	16.3	16.3		
	5-24	33.5	33.5	26.3	26.3	25.5	25.5		
	5-25	37.4	40.9	25.7	29.8	28.8	32.2		
	Ave*		36.8		27.8		27.5		
		A		D		E		F	
A	6-3	36.1	37.8	19.5	21.6	18.6	20.5		
	6-4	30.6	36.4	15.3	21.4	12.1	18.0		
	6-5	34.5	34.5	18.0	18.0			18.2	18.2
	6-6	33.0	33.0	19.0	19.0			16.6	16.6
	6-7	35.6	37.2	20.2	22.2			19.1	21.4
	6-8	19.5	19.5	1.9	1.9			6.7	6.7
	6-10	25.5	25.5	10.7	10.7			11.2	11.2
	6-11	27.7	27.7	12.7	12.7			14.4	14.4
	Ave**		34.9		19.5		19.4		17.6

* "Energy" average for six days.

** "Energy" average for seven days for positions A and D, excluding data for 6-8 and 6-9; averages for two days only at Position E, and for five days at Position F, excluding data for 6-8 and 6-9.

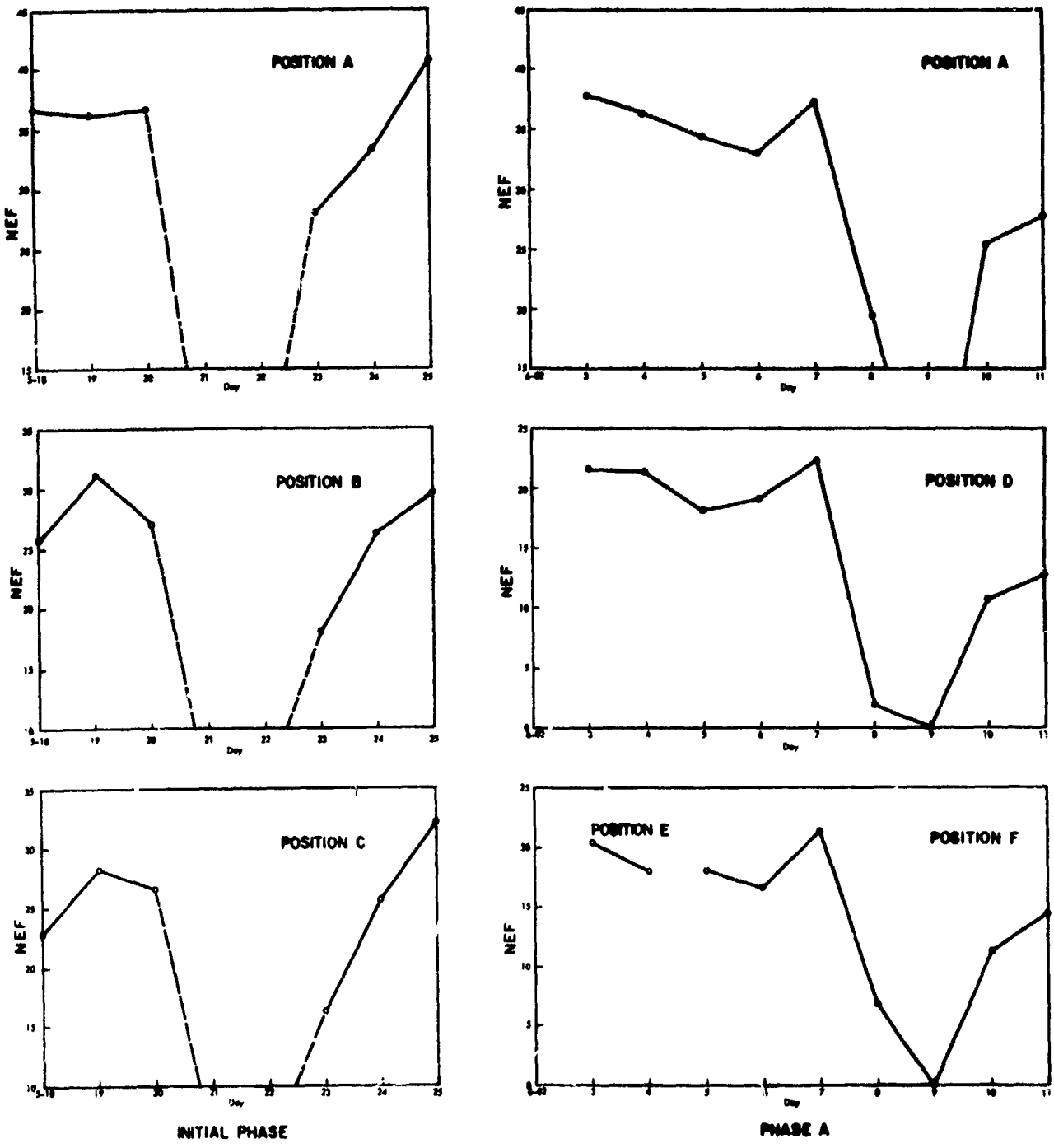

FIGURE 7. DAILY NOISE EXPOSURE FORECAST VALUES

The number of IFR flights between 2400 and 0600 and type of aircraft were determined by review of FAA traffic control "flight strips". The adjustments take into account both the number and the type of aircraft.* It will be noted that even though the number of approaches during 2400 and 0600 was small, the adjustments were sometimes significant because of the high weighting assigned to night flights in the NEF calculation procedures.

D. Mean NEF Values

Table VII also lists mean NEF values for the two test phases. These means are calculated in accordance with Equation 2, but include NEF values only for the days in which there are appreciable number of IFR approaches on runway 21R. Thus, for the initial phase, the mean value is based upon six days of measurements, omitting the almost neglible NEF values for May 21 and 22. On a similar basis, the mean NEF value for Phase A is based on several daily NEF values, omitting data for June 8 and 9 when very few noise events were noted.

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* Noise levels were estimated for individual flights between 2400 and 0600 by assuming, first, the mean level observed for all flights during that day, and then adding to this value, the difference between the mean value for the test phase and the test phase value for the type of aircraft involved. Thus levels were adjusted to account for differences in noise produced by four-engine, two- and three-engine jets and propeller aircraft.

V. COMPARISON OF NOISE LEVELS AND NOISE EXPOSURE BETWEEN TEST PHASES

The most direct comparison of differences in noise exposure due to test conditions is in terms of the mean noise levels observed at the different position . This comparison largely avoids variability introduced by the daily variations in the number of flight operations. However, a meaningful comparison of adjusted NEF values may also be obtained when the values are adjusted to a common volume of operations.

Figure 8 compares the mean noise levels for the two test phases. In this figure the mean noise levels from Table VI for each test phase are plotted as a function of the distance from the runway threshold. (Measurement positions may be identified in the figure.) The figure shows the very close agreement in mean noise levels (within 0.3 dB) observed at position A.

To illustrate the typical variation in noise levels for aircraft following the 2.8 degree glide slope at a constant thrust setting, two curves have been drawn through the noise levels at position A. In the figure, the difference between the curves is shaded. The upper curve assumed that the EPNL values decrease at a rate of 9 EPNdB per doubling of distance; the lower curve assumes a decrease of 11 EPNdB per doubling of distance.

Intersecting the two curves are horizontal lines bracketing the effective perceived noise levels measured at positions B and C in the initial phase and positions D, E and F in phase A. The difference between the two horizontal shaded areas represents, approximately, the reduction in noise levels between the test phases.

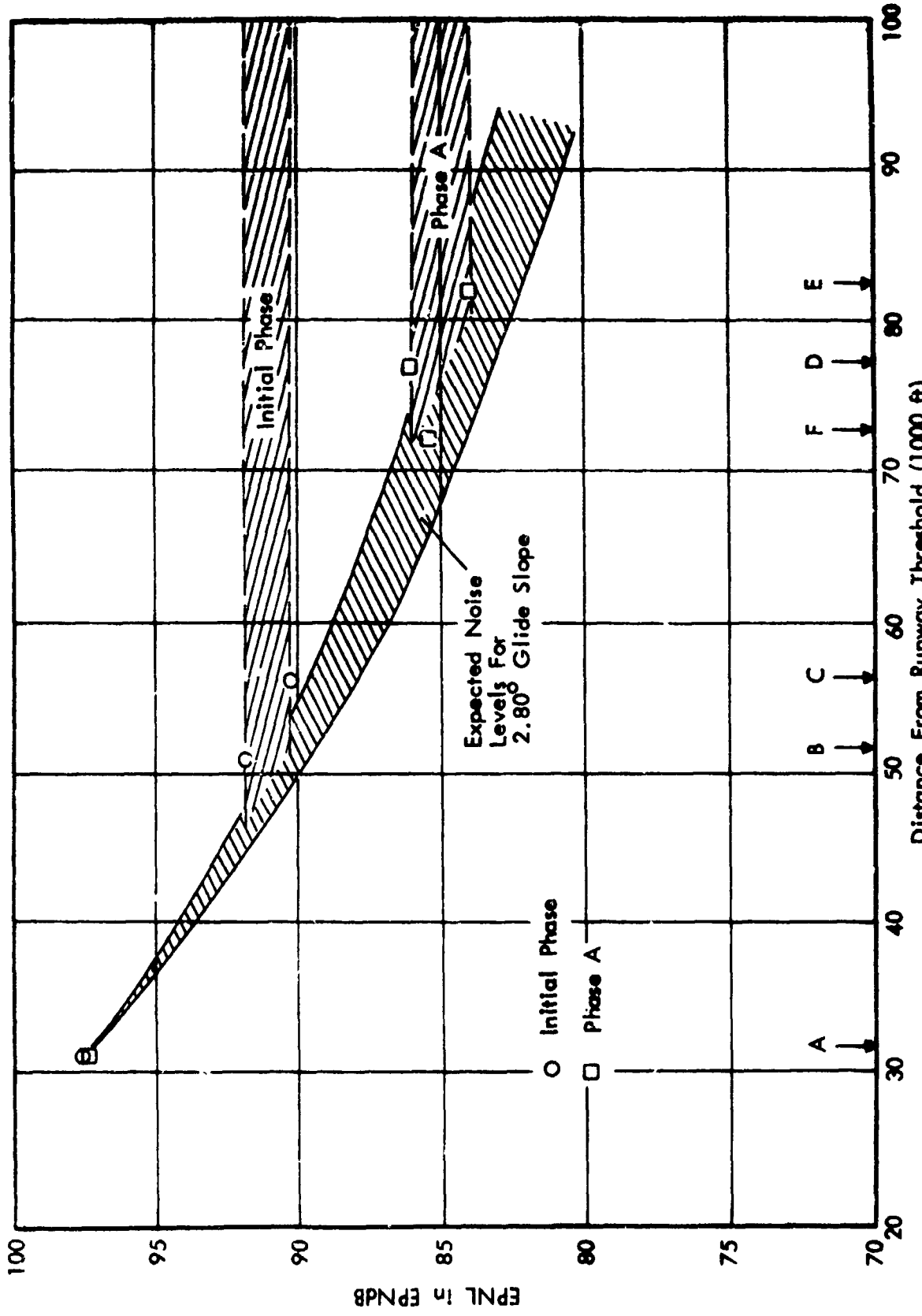

FIGURE 8. COMPARISON OF MEAN EFFECTIVE PERCEIVED NOISE LEVELS FOR THE INITIAL PHASE AND PHASE A TESTS

At distances from the runway threshold 90,000 ft and greater this net difference is approximately 6 EPNdB. This value is slightly greater than that expected from a typical EPNL versus distance curve, considering a simple change in slant distances from 2400 to 3400 ft AGL. Hence the test noise level comparison shows net noise reductions that slightly exceed simple estimates based on previous noise level information.

To reduce variations in NEF values due to test differences in volume of operations, a set of "equalized" NEF values has been computed from the NEF values of Table VII. These values are listed in Table VIII, and are also plotted in Fig. 9 as a function of measurement distance from the runway threshold.

TABLE VIII

COMPARISON OF "EQUALIZED" NEF VALUES

Position	Test Phase	NEF Value
A	Initial and A	35.9
B	Initial	26.9
C	Initial	26.6
D	A	20.4
E	A	18.1
F	A	19.9

The equalized NEF value for position A is the mean value for the two test phases. Equalized NEF values for the remaining positions were computed by adjusting the mean NEF values for the position (as listed in Table VII) by the difference between the

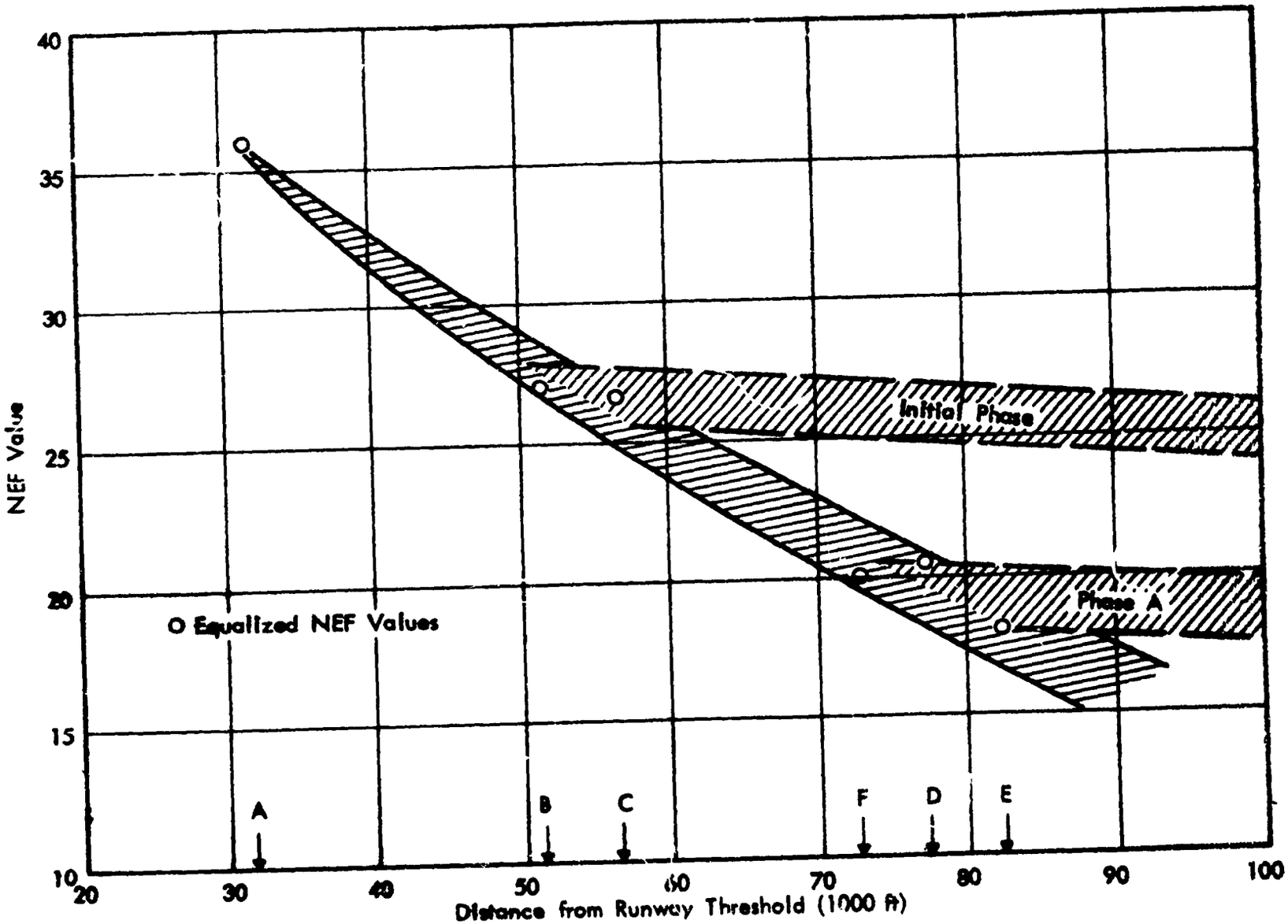

FIGURE 9. COMPARISON OF EQUALIZED NEF VALUES FOR THE INITIAL PHASE AND PHASE A TESTS

mean NEF value observed at position A (over the same time period) and the equalized NEF value at position A.*

In Fig. 9, the NEF values are bracketed by a curved shaded band. In addition, near-horizontal bands intersect the curved band to indicate probable NEF values during level flight portions of the two approach procedures. The negative slope of near-horizontal bands reflects the gradual reduction in noise exposure expected to result from the reduction in number of observed overflights at increasing distances from the runway threshold.

From the presentation of NEF values, as described above, the difference in NEF values occurring at distances of approximately 80,000 ft from threshold or greater is slightly greater than 6 dB. This difference is in good agreement with the difference in mean noise levels, depicted in Fig. 8. Thus, both mean EPNL and NEF values, equalized to remove differences in volume of operations, show a consistent reduction of about 6 dB resulting from the increase in ILS intercept altitudes.

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* For example, the mean adjusted NEF value at position A for the two days at which measurements were made at position E is 37.2 (the "energy" average of 37.8 and 36.4). The difference between 37.2 and the equalized NEF value at position A, 35.9, is 1.3. Thus, the equalized NEF value at position E is 19.4-1.3, or 18.1.

REFERENCES

1. "Test Plan: A Field Evaluation of the 3,000 Foot Glideslope Intercept Program at Detroit, Michigan and Tampa, Florida", FAA Air Traffic Service, May 1971.

2. D. E. Bishop, M. A. Simpson "Noise Exposure Forecast Contours for 1967, 1970 and 1975 Operations at Selected Airports", Federal Aviation Administration Report FAA-NO-70-8, September 1970.

3. "Official Airline Guide, Quick Reference North American Edition", May 197[illegible].

4. Federal Aviation Regulations, Part 36, "Noise Standards: Aircraft Type Certification".

5. "Supporting Information for the Adopted Noise Regulations for California Airports", Wyle Laboratories Report No. WCR 70-3(R), January 1971.

6. "Noise Standards", California Administrative Code, Chapter 9, Title 4, Department of Aeronautics, Subchapter 6 (Register 70, No. 48), 28 November 1970.

7. "Specification for General Purpose Sound Level Meter ", United States of America Standards Institude, USAS S1.4, January 1961.

8. "Frequency Weighting Network for Approximation of Perceived Noise Level for Aircraft Noise", Society of Automotive Engineers ARP 1080, July 1969.

9. "Definitions and Procedures for Computing the Perceived Noise Level of Aircraft Noise", Society of Automotive Engineers ARP 865A, August 1969.

APPENDIX

DATA ACQUISITION AND REDUCTION INSTRUMENTATION

This appendix describes the data acquisition equipment used in the field and the instrumentation used in the laboratory for data reduction. Individual paragraph references are keyed to pertinent sections of FAR Part 36.

A. Noise Measuring Equipment

Each measurement station had self-contained recording capacity, with the instrumentation indicated in Fig. A-1. The system consists of a Bruel and Kjaer Type 5144, 1/2-inch diameter, condenser microphone, a Bruel and Kjaer Type 2619 preamplifier (or Hewlett-Packard 15108B Preamplifier), a Bruel and Kjaer Type 2203 Precision Sound Level Meter, and a Kudelski Nagra III Tape Recorder. An Electro-Voice Model 355 Wind Screen was used over the microphone at all times.

A36.2(b)

The basic system response falls within the specifications of IEC Publication No. 179 "Precision Sound Level Meters". The response of the complete system was well within the tolerances specified in IEC Publication No. 179 as to sensitivity to a constant amplitude, sensibly plane progressive sinusoidal wave. A36.2(c)(2)

Field calibrations of the system were performed before and after recording aircraft noise. The overall system response was verified by use of a 1,000 Hz sinewave oscillator driving an insert resistor at the input to the microphone preamplifier. Overall acoustic sensitivity of the system was obtained through recording the output signal of a Bruel and Kjaer Type

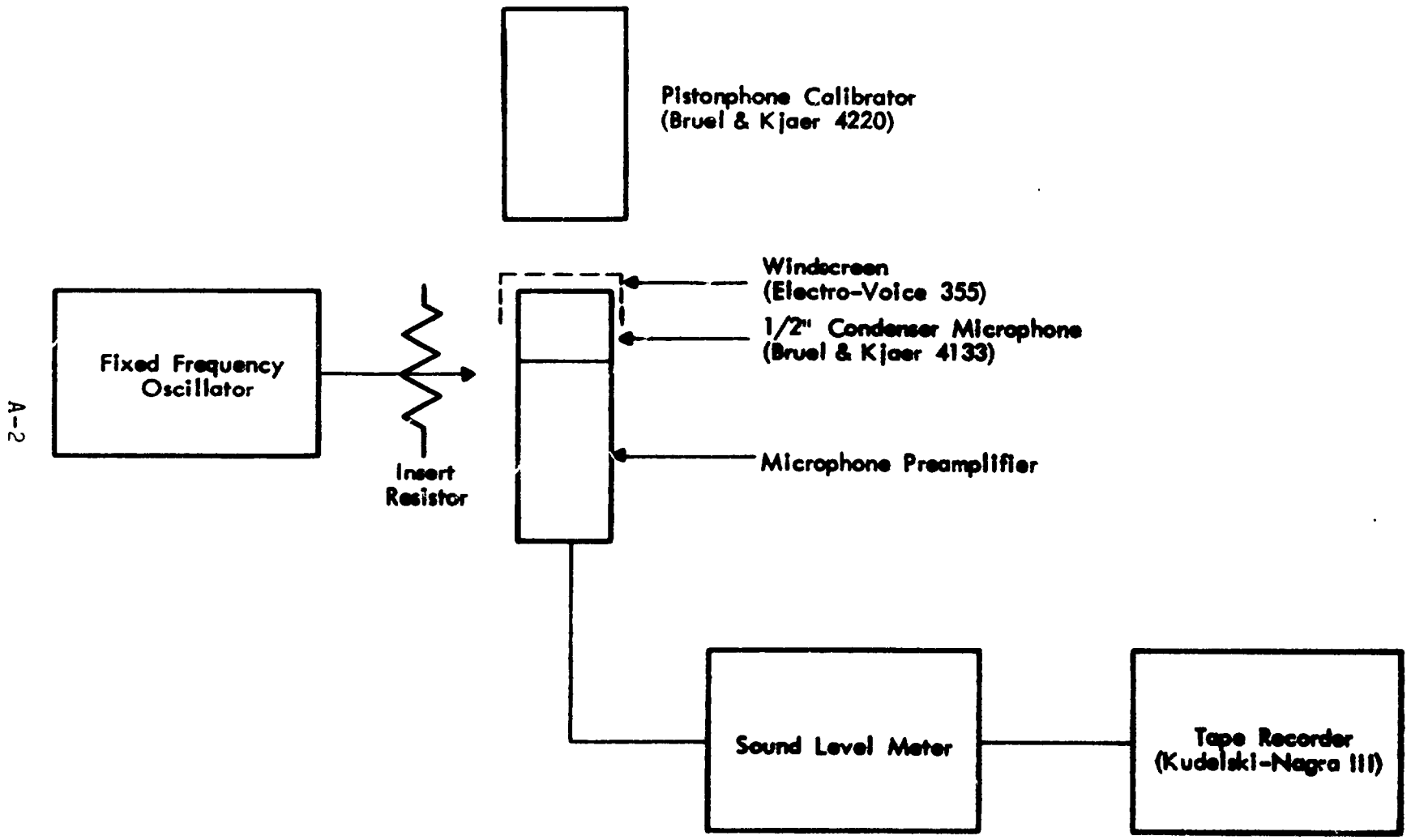


FIGURE A-1. BLOCK DIAGRAM OF FIELD MEASUREMENT EQUIPMENT

4220 Pistonphone Calibrator on the tape recorder through the system. Ambient noise levels and system electrical background noise were also recorded. A36.2(e)(2),(3)

In addition to the basic meteorological data, obtained from the ESSA weather bureau at Metropolitan Airport, individual measurements of wind speed, temperature, and humidity were also made at each noise monitoring station. A Weksler 315-1 Sling Psychrometer and a Dwyer Windmeter were used to obtain these data. A36.3(b)(3)

B. Noise Analysis Equipment

All noise measurements were analyzed by a real time spectral analysis system. A block diagram of this system is shown in Fig. A-2. The primary elements consist of a Hewlett-Packard Model 8054A Real Time Audio Spectrum Analyzer, under control of a Digital Equipment Corporation Model PDP-8 Computer.

The tapes were played back on an Ampex AG-350 tape deck. For each of the three Kudelski Nagra III recorders there exists a correction spectrum which enables the computer to correct the signal, recorded on that Nagra and played back on the AG-350, to a flat response. In order to make maximum use of the available dynamic range a preemphasis filter was employed to attenuate the low frequencies. The insertion loss curve is presented in Fig. A-3. Along with the computer sampling, a graphic level record is made of the tape. This enables the operator to select starting and stopping points of the analysis and to determine where to select a sample of the background noise. A36.2(d)

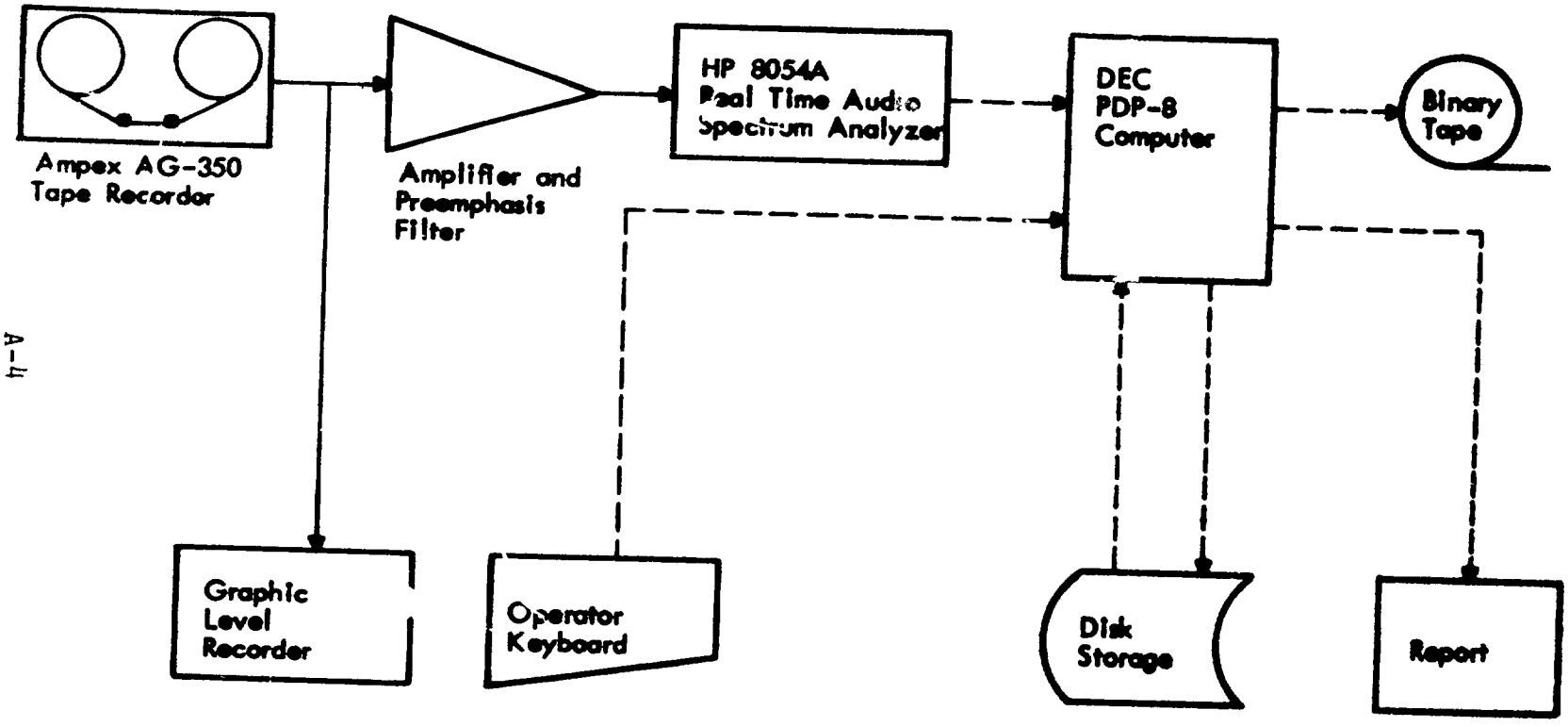
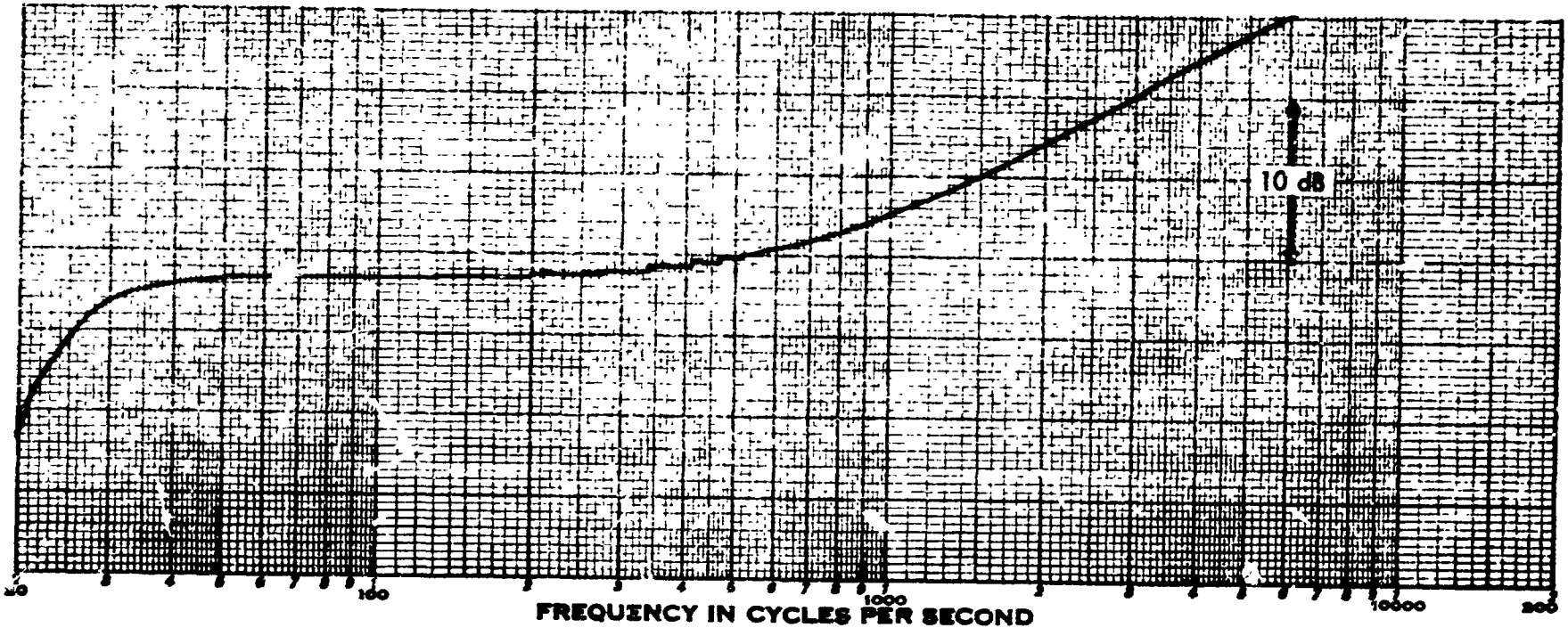


FIGURE A-2. BLOCK DIAGRAM OF LABORATORY ANALYSIS EQUIPMENT



General Radio Type 1304-B Beat Frequency Audio Generator (S/N 2096)
Bruel & Kjaer Type 2203 Sound Level Meter (S/N 112924)
General Radio Type 1521-A Graphic Level Recorder (S/N 288)

FIGURE A-3. INSERTION LOSS CURVE OF PREEMPHASIS FILTER

During the course of the analysis a sample is obtained every 0.5 seconds at the output of the 24 consecutive 1/3-octave bandwidth filters. (Center frequencies are from 50 Hz to 10 kHz.) The time sampling interval is derived from a 1-microsecond crystal clock and the accuracy of determining the 1/2-second intervals is within 5 microseconds. For each of the 0.5 second samples, approximately 30 milliseconds is required to read out the 24 1/3-octave bands, well within the 50 millisecond requirement. In a given frequency band the time for data transfer is 1 millisecond, well under the 5 milliseconds permissible. A36.2(5)

The spectral analysis system exceeds all the requirements of IEC Publication No. 225, "Octave, Half-octave, Third-octave Band Filters Intended for the Analysis of Sounds and Vibrations". The analysis system further meets the requirements on dynamic response, crest factor, linearity, dynamic range specified in Part 36. The resolution of the overall system is 0.1 dB. The overall accuracy of the system is $\pm$0.1 dB in terms of output level with respect to input signal.

The values of several weighted noise levels are computed for each 1/2-second sample. Important spectral information and a summary of the weighted functions, their 10 dB down duration time and integrated values are printed by the computer, as shown in Fig. A-4.

C. Calibration Procedures

Microphones - Absolute sensitivity of the condenser microphones was determined through use of a General Radio Type 1559-B Microphone Reciprocity Calibrator. A36.2(c)

A74

1/3 OCTAVE BAND CENTER FREQUENCY									
50	63	80	100	125	160	200	250	315	400
MAXIMUM VALUES									
67.0	66.9	64.3	70.5	71.9	71.8	69.1	72.3	69.0	71.0
69.9	69.8	69.6	69.[illegible]	73.2	77.1	77.[illegible]	72.3	75.5	65.4
60.1	49.7	*****	*****						
AT PNLT MAX									
*****	*****	*****	*****	66.6	68.1	63.6	66.5	67.9	66.8
67.4	67.2	67.8	67.8	73.0	77.1	71.4	71.7	75.5	65.8
60.1	49.5	*****	*****						

NOISE LEVEL SUMMARY

MEASURE	TIME	MAX	10DB DUR	INTEGRAL
A-LEVEL	22.5	83.0	16.5	91.5
D-LEVEL	22.5	90.3	15.5	98.6
PNL	22.5	95.4	15.0	103.8
PNLT	22.5	97.4	15.0	105.7
TONE	18.3	2.7	(2000 HZ BAND)	

PNLC = 96.9 EPNL = 95.7 SENEL = 91.5

A75

1/3 OCTAVE BAND CENTER FREQUENCY									
50	63	80	100	125	160	200	250	315	400
MAXIMUM VALUES									
61.6	65.7	*****	68.2	70.9	69.7	68.9	67.6	67.2	66.6
65.4	63.9	63.7	63.6	63.6	62.2	62.3	63.[illegible]	60.8	56.3
46.4	36.7	*****	*****						
AT PNLT MAX									
*****	*****	*****	68.0	69.2	68.0	[illegible]	67.6	64.4	66.3
64.8	63.9	62.9	63.6	63.2	61.9	[illegible]	61.9	59.1	54.9
44.6	35.9	*****	*****						

NOISE LEVEL SUMMARY

MEASURE	TIME	MAX	10DB DUR	INTEGRAL
A-LEVEL	19.5	73.1	22.5	84.0
D-LEVEL	25.0	79.1	22.0	89.8
PNL	19.5	85.1	20.5	95.6
PNLT	19.5	86.0	20.5	96.1
TONE	16.5	1.6	(3150 HZ BAND)	

PNLC = 86.6 EPNL = 86.1 SENEL = 84.0

FIGURE A-4. SAMPLE OF COMPUTER PRINTOUT

Sensitivity as a function of frequency was determined through the use of a Bruel and Kjaer Type 4142 Microphone Calibration Apparatus. This equipment consists of an electrostatic actuator and precision cavity. A General Radio Type 1304-B Beat Frequency Audio Generator is used to drive the input of the electrostatic actuator. The output of the microphone is recorded on a General Radio Type 1521-A Graphic Level Recorder.

The directivity pattern for the microphone is a function of the geometry of the microphone. Directivity patterns for a Bruel and Kjaer 4133 Microphone have been verified in our anechoic chamber.

The free field insertion loss introduced by the Electro-Voice Model 355 Windscreen has been determined by comparison of the outputs of two identical microphone systems, one with windscreen and one without, as exposed to an audio sweep frequency presented in an anechoic chamber. Over the frequency range from 45 to 11,200 Hz the insertion loss provided by this windscreen is zero to 4,000 Hz, 1 dB at 8,000 Hz, and 1.5 dB at 12,000 Hz. A36.2(c)(6)

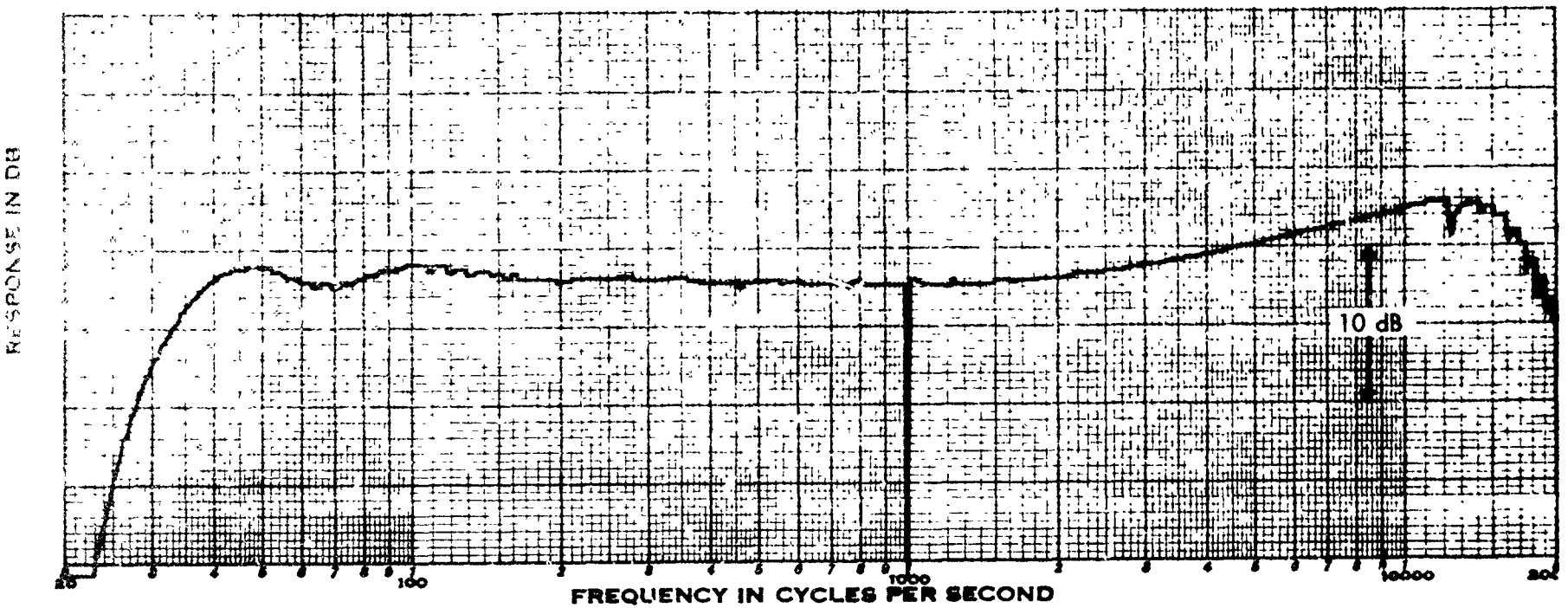
Sound Level Meters - The Bruel and Kjaer Type 2203 Precision Sound Level Meter employed in the field measurement system provides both an amplifier and a precision attenuator between the microphone and the tape recorder. The frequency response of the sound level meter has been obtained by recording a sweep frequency over the range from 45 to 11,200 Hz and recording the output of the sound level meter on the level recorder as described under the microphone calibration above. All systems show the frequency response characteristics to be well within the tolerances specified by IEC Publication 179.

A separate evaluation of the accuracy of the attenuator in each sound level meter was obtained by applying a constant input voltage at the input of the sound level meter, while observing the attenuator output voltages for various settings with a digital voltmeter. In all cases the attenuator inaccuracies were found to be less than 0.1 decibels Ampex AG-350.

Tape Recorders - Each Kudelski-Nagra III tape recorder is individually evaluated in terms of its frequency response and dynamic range capability. Each of the tape recorders if modified in such a way that no gain adjustment on the recorder is possible in the field. Input level adjustments are all obtained through the use of the attenuator in the Bruel and Kjaer sound level meter. Therefore, the changes in attenuator settings for the overall system are those determined above for the Bruel and Kjaer sound level meter, namely, within 0.1 decibels per step.

The overall dynamic range of each of the tape recorders has also been determined. Nominal signal-to-noise ratio capability for less than 3% overall distortion is 52 decibels for the tape recorders. This, of course, indicates a dynamic range in excess of 60 dB in any given frequency band.

Overall Recording System Response - The complete recording and analysis system is calibrated by a sinusoidal signal which is swept over the entire frequency range of the system. The signal is introduced by use of an insert resistor between the condenser microphone and the preamplifier. Thus a complete sine wave calibration is available from 45 to 11,200 Hz. A response curve of such a sweep played back on the Ampex AG-350 used for data reduction is shown in Fig. A-5. A36.2(c)(3)



Source: General Radio Type 1304-B Beat Frequency Audio Generator (S/N 2096)
Recorded: Through Bruel & Kjaer Type 2203 Sound Level Meter (S/N 112924) Input to Kudelski Nagra III (S/N 8340) 15 ips, CCIR, Ampex 641 Tape
Playback: Ampex AG-350 (S/N 2453231), Equalization +5 dB @ 10 kHz
General Radio Type 1521-A Graphic Level Recorder (S/N 288)

FIGURE A-5. RECORD PLAYBACK CHARACTERISTIC: STATION B / AMPEX AG-350

Analyzer - The characteristics of the analysis system are primarily determined by the Hewlett-Packard 8054A Real Time Spectrum Analyzer. This analyzer has a set of 24 consecutive 1/3-octave filters with geometric mean frequencies covering the range from 50 Hz to 10 kilohertz. The filter characteristics are well within the specifications provided in IEC Publication No. 225. A36.2(d)

The detection of filter output is performed by a quasi-RMS detector. We have evaluated the performance of this detector by recording successive bursts of sine wave signals of varying duration where the frequency of the sine wave is that of the geometric mean frequency of each filter. By these tests we have verified that, up to crest factors of 5, the output of the analyzer is within less than 1 dB of a true root-mean-square value for the signal in each of the frequency bands. Examining the response to a sinusoidal pulse of 0.5 second duration at the geometric mean frequency of each 1/3-octave band applied to the input, we find that the maximum output signal is 4±0.1 decibels less than the value attained from a steady state signal of the same frequency and amplitude, verifying the signal averaging time of the analyzer.

A36.2(d)(4)

The maximum output value of the analyzer is less than 0.5 dB different from the final steady state value obtained when a steady sinusoidal signal at the geometric mean frequency of each 1/3-octave frequency band is suddenly applied to the analyzer input and held constant.

The amplitude resolution of the analyzer is 0.1 dB. Repeated analysis of the same recorded random signal provides an output indication from the analyzer which is repeatable within 0.1 dB at all frequency bands. A36.2(d)(6)

D. Meteorological Equipment

The psychrometers used for determining temperature and humidity permit resolution to within 0.5 degrees F. This permits calculating relative humidity to within 3% for the temperature range observed.

The Dwyer windmeters permit resolution of wind speed to within 1/4 mph. in the range from 2 to 10 mph., and within 1 mph. in the range from 6 to 60 mph. A36.3(b)(2)